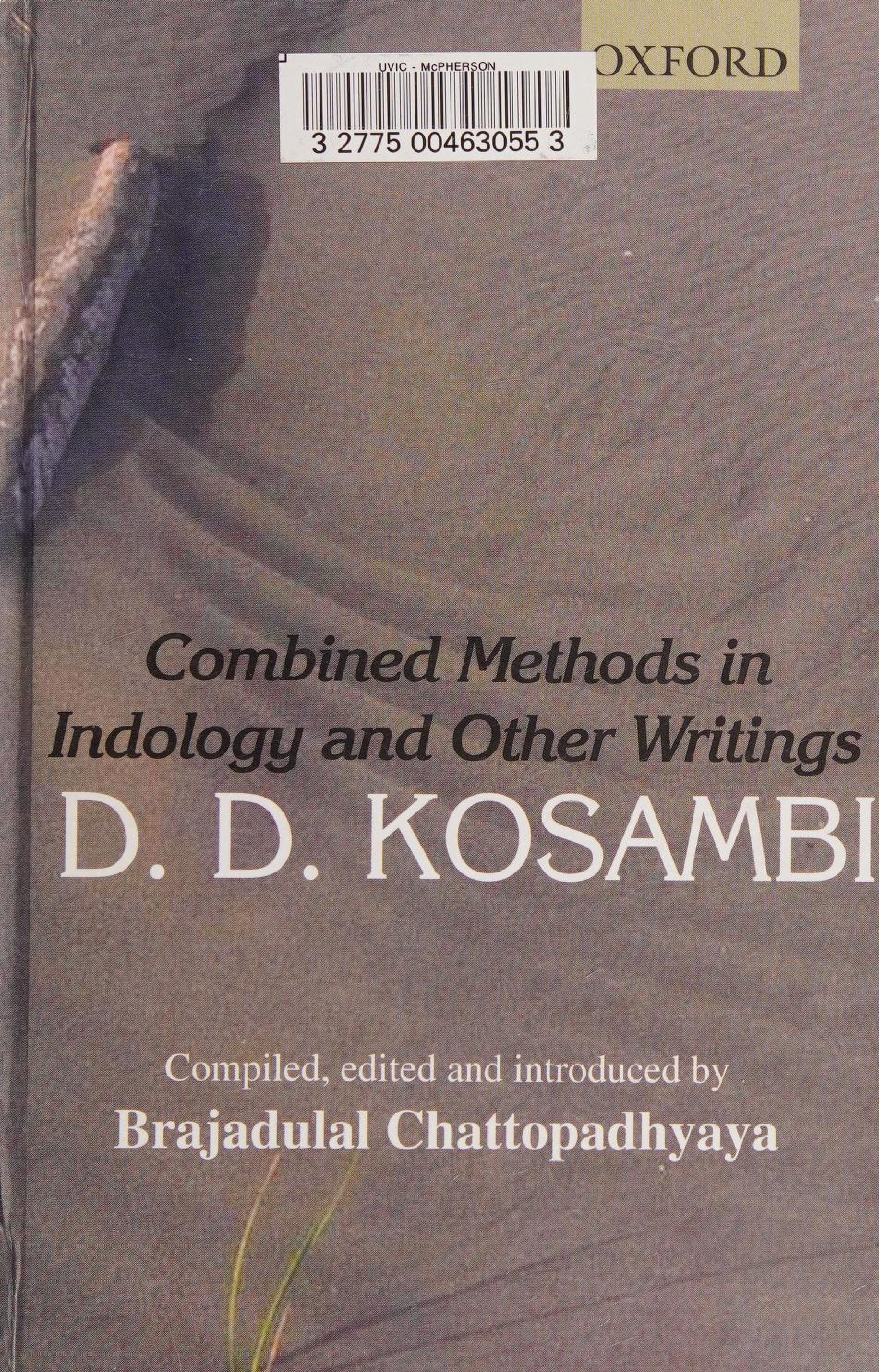

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Combined Methods in Indology and Other Writings

D. D. KOSAMBI

Compiled, edited and introduced by
Brajadulal Chattopadhyaya

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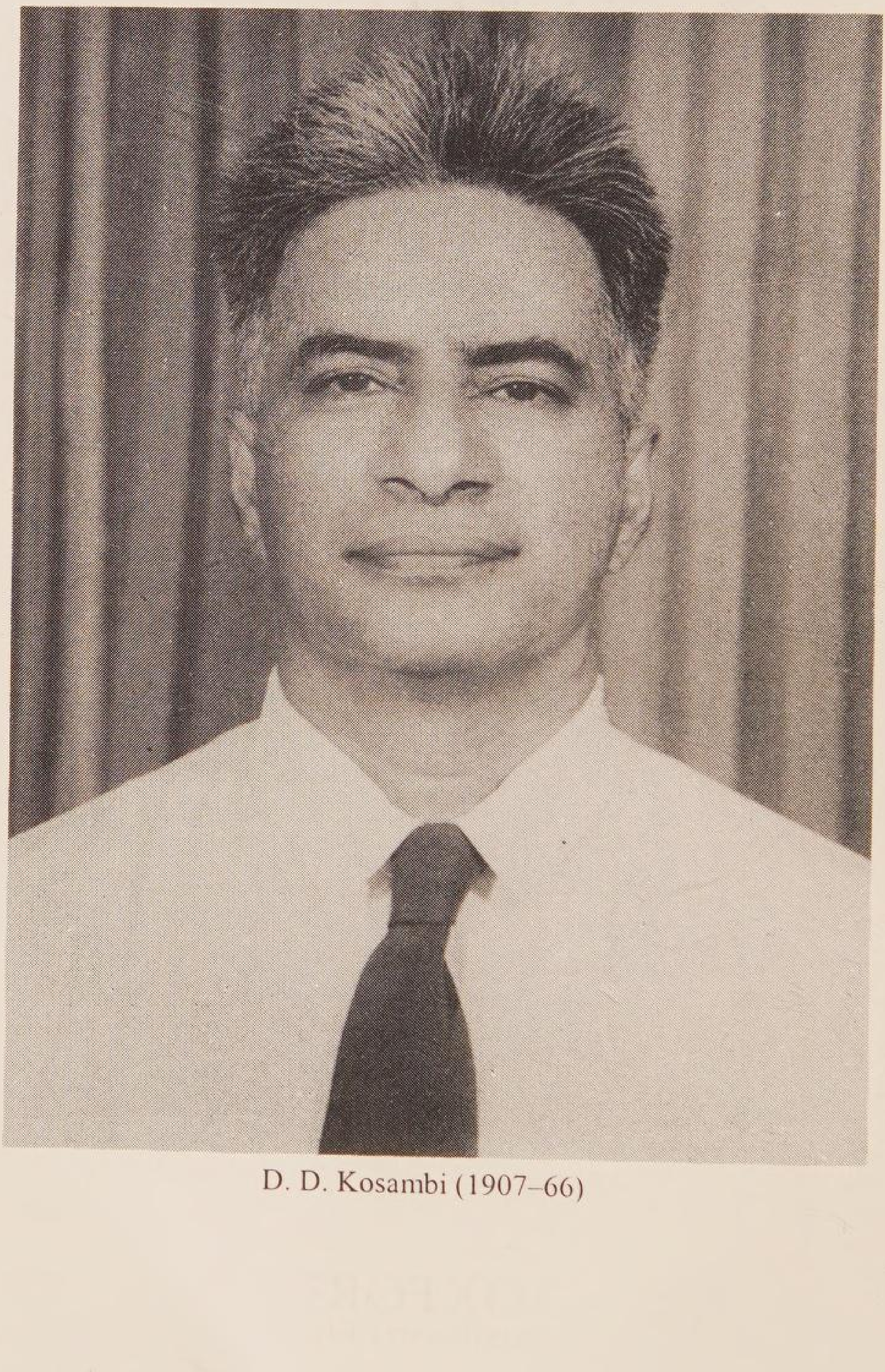
Combined Methods in Indology and Other Writings



D. D. Kosambi (1907–66)

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Combined Methods in Indology and Other Writings

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BRAJADULAL CHATTOPADHYAYA

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Editorial Preface and Acknowledgements

In explaining several choices that I have had to make in preparing this collection, as a compiler and editor, I would like first to refer to the fact that no complete and accurate list of Kosambi's writings—in the forms of essays, notes and reviews—exists. I started with the lists available in the volumes published in his memory,[1] which do include most writings, but, unfortunately, not all. I cannot therefore be sure whether I have been able to trace all his writings which needed to be considered for inclusion in the anthology. It is this uncertainty—and therefore the urge to utilize the opportunity to make the anthology comprehensive—which has prompted me to put together in this collection all the writings which could be traced and copied. There are however exceptions, and they ought to be explained. Two collections of Kosambi's essays, *Myth and Reality* and *Exasperating Essays: Exercises in Dialectical Method*[2] appeared during his lifetime and are easily available. With the exception of 'The Quality of Renunciation in Bhatṛhari's Poetry' which was included in *Exasperating Essays*, no other essay from these collections figures in the present anthology. 'Quality' and sections from Kosambi's long introduction to *Subhāṣitaratnakoṣa,*[3] jointly edited by him and V.V. Gokhale, have been included here as extraordinary samples of writings of what Kosambi called the genre of literary criticism.[4] Despite the existence of a separate collection of his articles on numismatics,[5] 'Scientific Numismatics' is likewise included here also for making the collection representative.

When working on a theme, such as on *gotra* system or on the *Bhagavad-Gītā*, Kosambi would produce several articles, including sometimes popular ones, which would deal with different aspects of the theme. Obviously, there would be repetitions of points earlier made and of sources used, but even in his popular writings and reviews, Kosambi never failed to make new points or offer suggestions which could be starting points for new kinds of research. Apart from the pressing need to gather and publish all of Kosambi's writings much of which remain beyond easy access, this is my justification for not trying to be selective,[6] or to modify the lengths of the original versions.

The arrangement of the articles in the volume is self-explanatory. It would have been pointless to arrange them in the strict chronological order of their publication. However, within each section some sort of chronological order has been maintained, but not always. For example, in section III, articles on archaeology or epigraphy have been put together, irrespective of whether they were published earlier or later than other articles in the section. It should be understood that the thematic division of the articles is only for the convenience of arrangement; there has been no intention at all to imply that they should be read as contained within the confines of their themes. Essays put under 'Concerning Method' can easily merge with those under 'Themes in History' or 'Archaeology, Epigraphy, etc.' The other sections may be somewhat separate, but Kosambi's reviews of Dange or Antonova would surely have to be read along with his other writings on the problems of social formation and periodization in Indian history.

So far as editorial intervention is concerned, it has been kept to the minimum. Since the articles appeared in a variety of publications—research journals, magazines, annual numbers, and dailies, different systems of spelling, use or absence of diacritical marks, etc. are some of the main variations which characterize them. Those originally published without diacritical marks or with a system of diacritical markings different from the current practice have been left unchanged. The only changes that have been made are in the direction of making the spellings follow one system and removal of diacritical marks from personal and place names. Whenever it has been found necessary to add a short comment or a reference, it has been done by putting the additional matter within third brackets; this too has been kept to the minimum.

Many of Kosambi's writings had illustrations in the forms of sketches and photographs. Tracing the originals would have been an arduous and perhaps an impossible task. Where illustrations appear, they are vital for the elucidation of the text. It was therefore thought necessary to include the illustrations by using photocopies. This experiment has not been altogether successful, and some really important illustrations, such as those in his article 'Dhenukākaṭa' (No. 27), had to be excluded as even in the original publications the illustrations had come out poor. By and large, my task, as I see it, has been to ensure, as correctly as possible, reproduction of the writings as they were originally published.

While it has been for me a singular honour to be associated with this work, the task has by no means been easy. The debts acquired, in the course of the work, have been many, and all I can do is to say 'thank you' to all the individuals whose encouragement and support have been spontaneous and generous.

Professor Meera Kosambi and Mr B.B. Sarkar were prompt with copyright permission and enthusiastic towards the project. In tracing various publications in which the articles were originally published but which all are not traceable easily, I had to depend on many individuals. I would, in particular, like to name Dr Visva Mohan Jha, Dr B.P. Sahu, Dr R.K. Chattopadhyaya, Sri Ashok Shettar, Sri Agni Kumar Hota and Sri P.K. Basant. When I was despairing about the translation of the Russian essay on 'nose index' Professor Sanjay Chandra, my colleague at the Centre for the Study of Regional Development, JNU, not only translated it promptly but also removed another source of despair by securing a photocopy, through Sri Ashok Mukherjee and Sri Arun Ghosh, of Kosambi's ISCUS article from Calcutta's Bhavani Sen Pathagar. Ms. Amol Kahlon too translated two long extracts from German in one essay. The Indian Historical Research Institute, Mumbai, and The Times of India have supplied photocopies of articles which appeared in their publications. Mrs. Vijay Joshi, teacher of Marathi at the Centre for Historical Studies, JNU, most kindly prepared a useful summary of Kosambi's Marathi biography by Chintamani Deshmukh for me. Even though at a somewhat late stage, I was extremely lucky to have been able to establish contact with Dr D.S. Chavda who was, in his very young days, a close associate and an enthusiastic partner in his archaeological expeditions of Kosambi. Despite his busy schedule, Dr Chavda has been generous with his time, discussing Kosambi with me, on his own made contact with people who could be of help, lent me his copy of Kosambi's biography and made suggestions for inclusion of pieces which were not originally listed for inclusion in the anthology.

At the Oxford University Press, Rukun Advani's ready endorsement of my hesitant proposal to undertake compilation of Kosambi's writings was a stimulating go-ahead. Later, Bela Malik has been a source of great help by being both patient and firm.

I am thankful to Professor S. Settar, and to Dr G. Racine of Maison des Sciences de L'Homme, Paris, for providing me with the leisure to write the Introduction. My wife Archana has, as usual, had to endure long silences.

If this important work is unsatisfactorily done, the fault is entirely mine alone.

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B.D. CHATTOPADHYAYA

NOTES

1. (a) *Science and Human Progress:* (b) R.S. Sharma and V. Jha, eds. *Indian Society: Historical Probings.* Another memorial volume is: (c) L. Gopal *et al., D.D. Kosambi Commemoration Volume* (D.D. Kosambi Commemoration Committee, Banaras Hindu University, Varanasi, 1977).
2. Another collection of his essays posthumously published is: *Science, Society and Peace* (Pune, 1986).
3. D.D. Kosambi and V.V. Gokhale, eds., *The Subhāṣitaratnakoṣa compiled by Vidyākara.*
4. *Bhartrhari,* 1946, p. 12.
5. D.D. Kosambi, *Indian Numismatics,* with an introduction by B.D. Chattopadhyaya (Orient Longman, Hyderabad, 1981; reprinted in 1992).
6. A useful selection of Kosambi's essays appeared as: A.J. Syed, ed., *D.D. Kosambi on History and Society: Problems of Interpretation* (Department of History, Bombay University, Bombay, 1985).

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Introduction

More than thirty years have passed since the untimely death, at the age of less than fifty-nine, of Professor Damodar Dharmanand Kosambi. Over the later years of his life, but more after his death, Kosambi has gradually emerged as an icon, with his name and work often, and on disparate occasions, invoked by social scientists, journalists and even sometimes by practitioners of contending political ideologies. The image is that of a pioneer of genuine Marxist scholarship of the Indian past, that of the 'father of Scientific Indian History'[1] who effected a 'paradigm shift'[2] in Indian historical studies; at the same time, he is also viewed as a nasty iconoclast with a 'predeterministic' approach, imposing an alien framework and an inappropriate prospective on Indian cultural heritage, as an excuse for rationality. His writings are only selectively read and cited; in historiographical assessments when Marxist departure is highlighted as a point of significant contrast with imperialist and nationalist modes of thought, the discourse usually begins with him. And yet, curiously, after so many years since his death, no sustained debates on his works and the intellectual position that he represented are available.[3] One reason for this may be that despite the ready availability of some of his writings, many of his important essays remain housed in a select number of libraries, in *Journals* which vary greatly in their contents. In addition, an integrated view of Kosambi who was by university education, profession and professional research a mathematician, and at the same time, an indefatigable Indological researcher, perhaps can never be satisfactorily achieved. A review of his work on Mathematics, Statistics and Genetics in combination with what his Indological contribution amounted to would be indeed a tall order even for someone with genuine admiration for Kosambi. For the present, we have to direct our query only towards the genesis, range and significance of his Indological interests alone.

I

Was Kosambi an 'amateur Indologist',[4] a dilettante with superficial expertise and interest, making generalizations on India's past, often irreverent, by fitting inadequate data into the straitjacket of Marxist theory? Kosambi himself would have us believe that his entry into Indology was fortuitous, a 'descent through the roof':

> Study of the records meant knowledge of Sanskrit, of which I had absorbed a little through the pores. Other preoccupations made it impossible to learn the classical idiom like any other beginner. So, the same method was adopted as for the study of statistics: to take up a specific work, of which the simplest was Bhartṛhari's epigrams *(subhāṣitas)*. The supposed philosophy of Bhartṛhari, as glorified by commentators, was at variance with his poetry of frustration and escape. By pointing this out in an essay which caused every godfearing Sanskritist to shudder, I fell into Indology, as it were, through the roof.[5]

And yet, going beyond what Kosambi himself says, it may be possible to trace the genesis of Kosambi's serious interests in Indology, History and a variety of other disciplines through the growth pattern of his intellectual makeup. Kosambi was educated mostly in the United States, both during the tenure of his father on Harvard Faculty, and after, and his training both in Harvard Law School and, as a mathematics student in Harvard University, helped him develop an amazing skill with languages. Some evidence of this skill can be seen in the references cited by him, but what one gathers from his biography and reminiscences of his friends and contemporaries, the languages that he knew well included Sanskrit, Pali, Greek, Latin, Hebrew, Arabic, German, French, Italian, Portuguese and Russian in addition to, of course, English and Marathi.[6] He had an easy access therefore to a really wide range of publications—an advantage which many of Kosambi's contemporary Indologists did not have—and Kosambi did make full use of his expertise in both his Mathematical and Indological works. Combined with command over languages was Kosambi's wide range of interests—an eclecticism which appears to have been encouraged by his scholar father. This is how one of his Harvard contemporaries describes Kosambi's room of Harvard student days:

> The room was lined with bookshelves filled with the widest imaginable variety of things. I recall *Allgemeine Sprachenkunde* (a book on linguistics), copies of the Bible in Latin, Greek and German, and other languages (which he liked to compare as language practice), a large number of paperbacks of French, Italian and German literature, as well as books in Indic languages, and of course scientific books, mostly in German.[7]

It is true that Kosambi did not learn Indology in a classroom situation, but he did learn Sanskrit to the extent of being able to prepare model critical editions of several Sanskrit texts, and this by no means suggests casual entry into the field of Indology. Kosambi himself has been several times uncharacteristically modest about the quality of his command over Sanskrit, but let me cite another authority, J.L. Masson, whose translation of the Sanskrit drama *Avimāraka* came out in 1970:

> He [Kosambi] told me he had been interested in *Avimāraka* for some time and had in fact done some research on the rather peculiar name ('sheep-killer'). He suggested that we collaborate on a work; he would write a long introduction which would investigate the anthropological data concerning the name, and I would include the translation of the play. I agreed and we sat down to re-read the play together in Sanskrit, checking it against my translation. We did this for a period of two weeks. During this time several passages in the translation profited from the astonishing range of Kosambi's scholarship. Wherever he has actually changed my previous translation I have noted this in the textual notes.[8]

The making of Kosambi as an Indologist has to be ultimately traced to his family's long-standing pursuit of traditional learning, his easy capacity to acquire language skill, his wide range of academic interests, and, above all, his penetrating curiosities about the world and the society around him. Kosambi had an abiding admiration for the way his father, a renowned scholar of Buddhist scriptures and editor of the Buddhist text *Visuddhimagga* for the Harvard Oriental Series, worked; he has made pointed references to the method of his father's work and to his father's writings on the Buddha and Buddhism. It is likely that in the intervening year between his return from and return to Harvard for his undergraduate studies, Kosambi was associated in some ways with his father's work at Puratattva-Mandir of Gujarat Vidyapith which was being organized by Mahatma Gandhi. His admiration for Gandhiji,[9] his closeness to his father's friend *ācārya* Muni Jinavijaya, renowned Jaina scholar who later introduced two of Kosambi's editions of Bhartṛhari to the scholarly world,[10] and his contact with people involved in the Indian national movement around the middle of the twenties must have made Kosambi directly aware of Indian affairs at this stage, despite his long years in Harvard. As a young member of the Mathematics Faculty at Banaras Hindu University (1929–31) and later at Aligarh Muslim University (1931–32), Kosambi may be seen to have started exploring the ancient sites and monuments in the areas of Benaras and Aligarh;[11] the mature phase of his archaeological fieldwork in the Deccan, which covered a long chrono-cultural span to include microliths, megaliths, early historical Buddhist cave sites, and medieval temple centres,[12] had their modest beginning in north India since the time of his return to India.

During his tenure at Fergusson College, Pune (1933–47), Kosambi's piece of literary criticism 'The Quality of Renunciation in Bhartṛhari's Poetry' came out in 1941 in Fergusson College Magazine. His work on Bhartṛhari's text, which resulted in the publications of four separate editions,[13] began in 1943. The preparation of these editions involved painstaking research—slow and monotonous—a source of major strain on both physical stamina and financial resources. But it was this work which was to earn him the distinction of being invited to edit Vidyākara's *Subhāṣitaratnakoṣa*, another work of Sanskrit anthology, from inadequate photocopies preserved in Tibet and Nepal, for the Harvard Oriental Series.[14]

I have so far focussed intermittently on Kosambi's handling of Sanskrit texts, because I believe that preparation of a critical edition of a text is a crucial, if not the ultimate, test of expertise, of perseverance and of scholarly integrity. The collation of a number of manuscripts, with considerable variations and at different conditions of preservation, involves not only the capacity to compare and select, but also knowledge of palaeography, and awareness of the possibility of existence of strata within a text. While editing a text or weighing coins on a scale, Kosambi was concerned with the minutest detail. Kosambi, and historians with a Marxist orientation in general, have often been accused in India of ignoring hard data or making generalizations without familiarity with sources and facts. Irrespective of whether one accepts his historical generalizations or not, Kosambi did train himself to respect facts. Commenting on this aspect of Kosambi's scholarship, Daniel Ingalls, Harvard Sanskritist and one of the severest critics of Kosambi's literary assessments, wrote in his reminiscences:

> What I admired in Kosambi was his instinctive respect for facts, I would almost call it a reverence, that would come into play even when I least expected it. To listen to him theorize on Indian history you might think he believed himself to have an understanding of its every turn. But no; he still had the patience to weigh on a jeweller's scale each new lot of punchmarked coins that came into his hands; he would still worry for hours over which of five manuscript variants to choose for a critical text. This side of Kosambi's character, the truly scholarly side, made no great flash in the world. . . . But to Kosambi it was part of his inner morality.[15]

It was this inner morality which made Kosambi acknowledge and appreciate, with humility, those text-workers whose works, he thought, merited acknowledgment and appreciation.[16]

II

The making of an Indologist does not explain the making of an historian. The texts critically edited by him were received with high acclaim in scholarly circles, but it is as the author of *An Introduction to the Study of Indian History;*[17] *Myth and Reality;*[18] and *The Culture and Civilisation of Ancient India in Historical Outline*[19] that Kosambi's approach and formulations regarding India's past are recognized, discussed and disputed. The enigma of the making of Kosambi as an historian is also the clue to understanding the way he developed his approach to Indian history.

Despite his long engagements with texts,[20] Kosambi was time and again critical about texts, or written records alone for that matter, as the sole source of knowledge about India's past; constructs of India's past based on texts alone produced only a 'tunnel vision' of history.[21] Texts also tended to be interpreted from the perspective of India 'as the changeless East' stereotype. Despite his deep admiration for the profound philological scholarship of many European and Indian text-workers, he was thus a severe critic sometimes of their interpretations of textual terms. Meanings of words could and did change as did historical reality. What the texts were seen to give was the vision of an essentially unchanging world or universal truth about the entire society. Kosambi was particularly fond of repeatedly citing the high incidence of widow remarriage among Maharashtrian common people of his times, whereas the social reformers of the nineteenth century were hard put to finding evidence of widow remarriage in ancient Sanskrit texts in order to legitimize their movement for its practice in contemporary society. Another custom of high incidence in Maharashtrian society, cited by him, is that of the payment of bride price of which there is clear reference in the *Mahābhārata* in relation to the country of the Madras, but which is deliberately obfuscated and derided as a non-Aryan practice by the Brahmin organizers of texts.

Clearly then there is a mismatch between the textual reality as it is constructed and contemporary Indian reality, and, to Kosambi, it is contemporary Indian reality alone (because of the encapsulation within it of many stages of history) which can make us try to understand the past reality, both of written records and what is available outside written records.

> This is not too difficult in a country where contemporary society is composed of elements that preserve the indelible marks of almost every historical stage. The neglect of such analysis leads to a ridiculous distortion of Indian history and to a misunderstanding of Indian culture, not compensated by subtle theology or the boasts of having risen above crash materialism.[22]

Contemporary reality being an encapsulation of many historical stages, what were the alternatives to written records alone for a study of these stages? One obviously was fieldwork, to observe and analyze the tremendous diversity in contemporary reality[23] and to understand the way the past has continued and acquired new connotations in the present. The history one is talking about is then different from the history currently reconstructed, on the basis of written records alone. Kosambi's remarks explain this:

> But what is history? If history means only the succession of outstanding megalomaniac names and imposing battles, Indian history would be difficult to write. If, however, it is more important to know whether a given people had the plough or not than to know of the name of their king, then India has a history.[24]

The other was Marxism. For Kosambi Marxism was the only acceptable philosophy as a guide for desired change in the contemporary world, but it was also the correct perspective for understanding patterns of change in Indian history. Both Kosambi's fieldwork and Marxism need a little further clarification. There have been some misgivings about Kosambi's notion of 'survival'[25] which is inextricably connected with his statements about fieldwork, for his use of 'survival' has been interpreted to mean both unilinear evolution in which 'survival' refers to the poor remnant, and, therefore, there is value-judgement on what has survived. There is a certain measure of value-judgement, in terms of what Kosambi would consider efficiency of production and social complexity, in the way he viewed survivals; to him, plough-agriculture is certainly an advancement upon pre-plough economy. But 'survival' in a broader sense relates the cultural significance of tradition located in the life pattern, beliefs and practices of living communities to the totality of existing societal pattern itself and not in isolation from it; sometimes what has come down from the prerecorded past has outlived, although with new meanings,[26] more ephemeral historical stages. Kosambi refers to the mother cult of Lumbinī,[27] antedating the birth of the Buddha, at the sacred grove where the Buddha was born and thereby became an object of veneration among the Buddhists. When Kosambi was writing, the Śākyas and the Buddhists had gone, but Lumbinī continued to be venerated as the centre of the mother cult. Survival then means the vertical continuity of myriad cultural elements, in a state of flux, through Indian history which has thus to be understood with reference to both recorded and unrecorded evidence. Place names, cult centres, festivals—all were ingredients of history: all had distinct meanings for understanding the present in relation to the past.

History then has to be studied in the field, but one has to understand that by fieldwork Kosambi was not referring to archaeological investigations alone. One suspects that this is where he was somewhat sceptical of the work, being done in his time, by professional, institution-based archaeologists.[28] In a letter, dated July 30, 1961, Kosambi wrote, commenting on his own fieldwork:

> I also was an observer, though the questions I asked and the sites inspected by us had a purpose developed from long experience. The main intention was always to investigate the relation of modern Indian life (at the lowest levels) with the Brahmin-recorded tradition; and also to study the transition from prehistory to history.[29]

This essentially should be the meaning of his fieldwork and of his 'survivals', in the plural; the 'survivals', their meanings and the way they together, in their journey through history, constitute the present, can alone make Kosambi's notion of historical change in India in Marxist terms understandable.

There is a genuine reason why further discussion on this is necessary. The reason is that there was indeed a big difference between how other Marxist Indologists used the concept of the 'Mode of Production' and how Kosambi was trying to use it in the Indian context.[30] In referring to Kosambi's historical approach, and in comfortably and securely keeping him ensconced in a Marxist basket, the following statement made by him in both his *Introduction* and *Culture and Civilisation* is, following Kosambi himself, underlined: *'History is the presentation in chronological order of successive changes in the means and relations of production'*. He, however, went a step further and himself clarified: 'Our position has also to be very far from a mechanical determinism, particularly in dealing with India, where form is given the utmost importance while content is ignored. Economic determinism will not do. It is not inevitable, not even true, that a given amount of wealth will lead to a given type of development. The complete historical process through which the social form has been reached is also of prime importance'.[31]

The 'complete historical process through which the social form has been reached' could be, if one follows Kosambi's writings closely, understandable in terms of the way he himself interpreted the Marxist framework of historical change,[32] the mechanism of change in existing Indian historiography available to him having been through wars, conquests, dynastic shifts—the agency of change, in other words, being the activities of those he called 'megalomaniacs'. I shall make further comments on Kosambi's Marxism in relation to his vision of historical change later, but it may be noted here that Kosambi was contemptuous of both Soviet and Indian Marxist attempts to delineate social formations and social change in early India. To him, 'the complete historical process' was the uniquely Indian process, to be explained by the logic of Indian societal developments and in terms of Indian cultural elements, *culture* being understood 'in the sense of the enthnographer, to describe the essential way of life of the whole people.'[33]

In developing his ideas about the trajectories of historical change in India, and of Indian history in general, it must be noted, Kosambi did not really have a working model before him. He did, in his writings, refer to archaeologists and ancient historians with leftist orientations; he had particular admiration for the works of George Thompson on early Greece.[34] In 1965, in his *Culture and Civilisation*, he was quoting approvingly, E.H. Carr's statement that 'the function of history is to promote a profounder understanding of both past and present through the interrelation between them.'[35] But, then, this is what Kosambi was himself trying to achieve, in his fieldworks through the fifties and early sixties, observing, recording and analyzing the tradition which was living in relation to meanings from the remote past, underlining the reciprocal relevance of the contemporary and the past.

III

In his Preface to *An Introduction to the Study of Indian History*, Kosambi wrote: 'This book does not pretend to be a history of India. It is merely a modern approach to the study of Indian history . . . To this end, the examples given here have been intensive, from my own (necessarily restricted) experience and reading.'

Kosambi's approach to Indian history started with the admission that no chronological history of India, in the way European or Chinese history was written, was possible, although his *Introduction* did have a 'chronological outline' (xvii–xix) corresponding to the order in which the ten chapters of the book were arranged. His historical approach was founded on a chronological perspective which was his response to the 'absence' of chronology and events in Indian history; even if Indian history could not be written with the content of historical events and narrative continuity as in European or Chinese history, an alternative history was still possible. Construction of such a history obviously involved altering the approach.

Even though the framework for this alternative approach was provided by Marxian 'successive developments in the means and relations of production', obviously Marx had not worked it out in the context of India, and, in any case, nor was Kosambi entirely satisfied with Marx's characterization of pre-colonial Indian society.[36] Since also, Marxism is not 'a substitute for thinking',[37] the approach present in Kosambi's overview of Indian history has to be regarded as representing his own thinking. It may be interesting to quote here a few lines from the beginning of chapter VII of his *Introduction*, titled 'The Formation of a Village Economy'; this is a chapter which actually deals with the period of the Mauryan Empire:

> The last three chapters drift away from the definition of history given at the beginning of this work. The reader may be lost in the text critical morass presented by tenuous legendary material uncollated with archaeology. The fact is clear that Magadha emerged as the dominant Gangetic state, ruining alike petty Vedic kingdoms, Aryan tribes neither known to nor following the Vedas, and aborigines not yet Aryanised.

The awareness that he had drifted from the 'definition of history' is an admission of the need to do so, since simply providing a definition of history does not resolve the task of reconstructing history's specific trajectories. Reconstructing the route to Magadha's ascendancy at a particular phase in early India involved making sense of 'tenuous legendary material' and situating this sense in the context of an over-view. His alternative Indian history thus in a sense does not automatically flow from a 'definition of history' as such, but, following from that basic definition of change, to the formulation of a series of questions which would relate to the society one was studying:

> Thus the more important question is not who was king, nor whether the given region had a king, but whether its people used a plough, light or heavy, at the time. The type of kingship, as a function of property relations and surplus produced, depends upon the method of agriculture, not conversely. What was the role of caste in breaking up tribal groups to annex them to society? Where did the metals come from? When did commodity exchange crops like coconut become important; what relations did they have to communal and private land-holdings? Why have we no large-scale chattel slavery in the classical period, no proper serfdom in the feudal? What is the reason for the survival of mesolithic rites, continued worship of stone-age gods even today among all classes? These questions have at least to be raised, their answers worked out as far as possible.[38]

The questions posed are not exhaustive, but they do reflect a particular accent, and they amount not to a narrative history of India but to a particular way of choosing, organizing and interpreting data. Except marginally, data from many regions, such as the south, remain unrepresented in his writings,[39] but one must remember Kosambi's initial statement in the

Introduction that he was not writing a history of India. His substantial chapter 'The Heritage of Preclass Society' in the *Introduction* is, for example, not an uptodate survey of the pre-and protohistorical cultures of India unrelated to other chapters, but an attempt, in the form of a synthesis of his many other writings, to understand the productive and ideological roots of Indian society as they could be analyzed from archaeological evidence and living traditions.

It is not necessary to present here a summary of Kosambi's historical writings, but his accent not being on narrative history but on changes of modes through which society reproduces itself, it is imperative that we understand in what ways he was consistently differing from those others who too seemed to have worked with the same approach. The difference would be clear from the way Kosambi dismissed the writings of both D.A. Suleikin[40] and S.A. Dange[41] on the formation of early Indian class society. Kosambi's work on this had to follow the course of Indian evidence chronologically, through the Indus valley civilization, the 'Aryan Society' of the Vedas, to the ascendancy of Kosala and Magadha, before the emergence of the first Indian empire—the Mauryan empire. In the Indian context, he argued, in terms of the evidence available it would be absurd to postulate a passage from Primitive Communism to Slavery: 'If we wish to study the oldest Indian communities, the fact has to be faced that those [of] whose antiquity and means of production we have any certain knowledge have passed far beyond the primitive, into civilization.'

The contrast between Indus valley society with 'the fully developed city of such magnitude with all its high technique and the complex social organization thereby impiled' and the Aryan society,[42] despite continuities of earlier cultural elements into Aryan society, is important for two reasons: (a) Aryan society's productive basis included horse, iron and plough, and therefore had more effective ways of creating a coercive state, and (b) the formation of the Śūdra *varṇa*, representing the basis of labour service in society. 'Because of the Caste System', Kosambi wrote, 'India had helotage, not slavery. Thus Dange's very title is wrong, for his sources contain neither primitive communism, nor slavery.' State formation, crystallizing in the establishment of the Magadhan empire, is crucial as the basis of this class society because the state is directly involved in the creation of the true village which is the foundation of the state, through Śūdra labour.

Kosambi saw 'feudal' development in India almost as an inevitability, but although a substantial part of his *Introduction* and other writings were devoted to the elaboration of his ideas on Indian feudalism, there has hardly been an attempt to analyze them and place them in the context of the differences of approach. To continue therefore with the context of differences, Kosambi had serious reservations about what may be called the K.A. Antonova model of Indian Feudalism.[43] According to Antonova, who based her reconstruction of the chronology and structure of feudalism on the practice of landgrants, feudalism began to develop in India in the fifth to the seventh centuries; 'from the landgrants of the 7th–8th centuries, we see that the system of feudal hierarchy is already established . . . in future these landgrants will reflect the struggle between the feudal lords and the 'burghers' (of the middle ages) for their domination in towns'.

Kosambi's major criticism of this reconstruction, apart from pointing to the incorrect use of landgrant evidence, is that it does not take note of the specific features of Indian development from the fourth century onwards: 'The presence and decay of extensive tribes, the new functions of caste and Brahmanism, the real growth of plough agriculture plus village settlement all over the peninsula, rise of trade volume inspite of decrease in commodity production per head, do not appear here at all'. Why Brahmin in the earlier period was 'the *almost exclusive* (emphasis in the original) recipient of landgrants' was not explained by Antonova to whom, as a 'serious materialist historian' 'caste was of no importance'. For Kosambi, 'this throws away what little remains to us of source material in Indian history, for *caste is an important reflection of the actual relations of production, particularly at the time of its formation*' (emphasis in the original). On the use of landgrants, Kosambi's comment was: 'If such gifts constitute evidence for feudalism, then feudalism in India has to be put nearly a thousand years earlier than Antonova has done'. Also chronologically, 'not only do burghers fail to appear, but the individual merchants who might have become burghers sometimes turned into feudal lords'.

Kosambi's feudalism extended from the early Christian centuries to at least the eighteenth century,[44] and in references to Kosambi, it is customary simply to mention briefly his idea of the evolution of the feudal formation in two stages: 'Feudalism from above' and 'Feudalism from below', without relating the totality of his references to Feudalism to his characterization of the two stages. For one thing, Kosambi often used such expressions as 'Primitive feudalism'—'Pure feudalism'; 'Simple feudalism—Mature feudalism' which would, it can be assumed, correspond to his two-stage scheme of feudal development, which is better expressed in his own words:

> Feudalism from above means a stage wherein an emperor or powerful king levied tribute from subordinates who still ruled in their own right and did what they liked within their own territories—as long as they paid the paramount ruler. These subordinate rulers might even be tribal chiefs, and seem in general to have ruled the land by direct administration, without the intermediacy of a class which was in effect a land owning stratum. By feudalism from below is meant the next stage . . . where a class of landowners developed within the village, between the state and the peasantry, gradually to wield armed power over the local population. This class was subject to military service, hence claimed a direct relationship with state power, without the intervention of any other stratum. Taxes were collected by small intermediaries who passed on a fragment to the feudal hierarchy, in contrast to direct collection by royal officials in feudalism from above. In both cases, remnants of previous systems survived (locally or in form) down to the foodgathering tribe. The basic difference between these two stages derives from the slow increase of trade and commodity production.[45]

Perhaps Kosambi's own discomfort with the way he conceived feudalism, which will be mentioned in the next section, derived from its long chronology and assumed inevitability of 'some feudal developments'. The other problem is that his own definitions and chronology would often not match his evidence. For example, if his earlier 'feudalism from above' was essentially a type of political feudalism, then the Sātavāhana period inscription of the middle of the second century AD from Myakadoni that he refers to, with clear indication of the existence of superior rights at the level of the village of Vepuraka, in their relationship with military service, would be a negation of that kind of feudalism and a more appropriate evidence for his 'feudalism from below'. His dating of the crystallization of 'feudalism from below' from the reign of Firuz Tughlaq in the fourteenth century 'after several false starts'[46] becomes equivocal when one relates this to his almost absolute and confident dating of *sāmanta* as feudal baron between the middle and the close of the sixth century, or to his reference to 'Pure' feudalism, beginning in the later Gupta period but 'enormously stimulated by Muslim trade and military penetration after AD 1200.'[47]

Despite this equivocation, which is so atypical of Kosambi's writings, 'feudalism' in the way he formulated it in sharp contrast to the feudal mode of others, remains an integral part of his approach. The 'approach' set an agenda, and the historiographical significance of this agenda lies in the fact that at least among Indian historians of India's early past, the issues raised by him, such as those bearing upon the legacy of pre-literate society; the nature of Ṛgvedic society and the presence in it of non-Aryan elements; iron technology and social change; state formation and *varṇa*; changes in the structure of the Buddhist *saṃgha* and the locational pattern of rock cut cave monasteries; the social significance of the ideology of *Bhakti*; and the character of what is seen as Indian feudalism continue to be major historical themes to be researched upon and debated.

IV

In what sense, then, does one take Kosambi's work to suggest a real departure—a 'paradigm shift'—from past historiography? Answers to a question like this are bound to be subjective, largely depending on the position one takes in relation to a much refined historiographic scenario in the dying decade of the twentieth century. But to see Kosambi's work solely in the light of contemporary historiography and not by situating it in the context of the period in which he was working would be travesty of historiography itself, made worse by bracketing him with a host of other Marxist historians, as if his work must need be weighed only on a Marxist scale.

The historiographical situation, up to the middle of the fifties, as Kosambi saw it, was dominated by 'official and fashionable' histories:

> Beginning with Vincent Smith's *Oxford History of India* (with its praise for 'strong' empires of all sorts) and finishing as of 1954 with the Bharatiya Vidya Bhavan's *Age of Imperial Unity* and *The Classical Age*. These books start with an incredible slender foundation of valid data, on which an imposing superstructure of conjecture, mere verbiage, and class-fashions is erected; of course, the class is no longer the British but the Indian bourgeoisie, which strives desperately to produce a history as 'respectable' as that of the foreigner in his own country.[48]

The monumental nationalist project of the Bharatiya Vidya Bhavan to write India's history in several volumes achieved, according to Kosambi, only an inversion of the premises of European historiography and of European historical scholarship on India. I would venture to suggest that the major breakthrough that Kosambi's work signified was to free Indian history from the tyranny of European historiography. One may object to this statement by pointing to the numerous references in Kosambi's writings to European mythology, to European practices, and to his free use of terms like 'baron', 'vassal', 'serf', 'feudalism', 'bourgeoisie', etc. in the Indian context. One should however keep in mind the entire corpus of Kosambi's writings while evaluating their use. Kosambi obviously viewed history in comparative terms, but contemporary society and culture in India being so different from anywhere else, the actual processes of the formation of that society and culture had to be understood in its own terms. Political or dynastic history, administrative, constitutional or legal history by themselves, and in isolation, were not important to him as they were to nationalist historians whose model was derived from European historiography. The difference in conceptual frame meant redefining the scope of historical enquiry; it meant shifting the focus from what was being routinely studied and highlighting new areas of priority.

Kosambi's shift to society and culture in its entirety, both past and present, including within its ambit the elites and the marginals alike,[49] was a redefinition of the scope of history and therefore redefinition of the sources of historical knowledge. Conventional sources would no longer suffice, and, in any case, could no longer be studied in isolation. The shift had to be to 'Combined Method': using what would today be called ethnoarchaeology,[50] anthropology, mythology, as well as fresh analyses of meanings of words in written records. It would be simplistic to attribute these shifts to a particular historical approach unless the actual working of the method can be demonstrated, and, it would seem that with Kosambi the actual work began by asking questions. To repeat a point made earlier by citing his series of queries in *Introduction*, in his critique of the Bharatiya Vidya Bhavan project too Kosambi commented:

> . . . When did regular coinage appear? What, in particular, did Asoka's coins look like? The answer exists, but one finds nothing about punch-marked coins in the entire work. What was the essential difference between Mauryan and Gupta empires, if any? Why did the latter produce great Sanskrit literature, not the former? On the other hand, why do Buddhism, Jainism, the Ajivikas, and so many other contemporary religious sects of the type arise in Magadha, all becoming prominent at about the same time? Does this have no connection with the imperial expansion of Magadha, of which so much is made in volume II? Why had Patna, once the greatest city in the world, dwindled to a pair of villages by the time of Hiuen Tsang though the surrounding countryside was quite as productive, fertile and prosperous as before? Why did the Greek Menader not try to introduce the Greek way of life (or at least something like the Athenian academy) into the country; why did he and so many Yavanas, Sakas and other foreigners

turn to Buddhism or 'Hinduism'? Why did this trend suddenly change with the Islamic conquest—yet gradually reappear by the time of Akbar in a totally different manner?[51]

Obviously, 'no historian can say everything that happened, having often to select from sources that have already selected what seemed important enough for them to be recorded', but, even so, 'any serious history' to be considered a worthwhile enterprise ought to be able to raise and answer relevant questions. 'The very names of our numberless castes, the innumerable local supersitions practised by Brahmins with rewritten scriptures or without any reference at all to scripture, attest the mutual interaction of tribal and agrarian society. But the nature of tribal cultures, the various methods whereby the advance to a general society beyond the tribe was achieved, receive no consideration whatever from the Bharatiya Vidya group, which thus discards the main achievement of ancient Indian history.'

The 'paradigm shift' then has to be understood in terms of Kosambi's redefinition of the scope of history, which broke down the compartmentalization of earlier history, in terms of his designing integrated methodology for harnessing diverse sources and in terms of his emphasis on asking questions which these diverse sources and the society they emanated from alone could generate. If they together constituted a thoroughly new approach, they also meant breaking down of the sharp barriers between periods of history, of the entrenched notion of fixed periods. Kosambi does occasionally and loosely use such terms as 'Muslim' period, but in his long-distance vision of Indian history, there were only 'main advances',[52] not replacement of one period of Indian history by another.[53] If markers of change were to be identified, they had to be not in the form of sharp breaks or revolutions, but in the form of these 'main advances'. 'The advance of agrarian village economy over tribal country is the first great social revolution in India; the change from an aggregate of gentes to a society.'[54] Leaving this out, if one were envisaging 'main advances', then they were: (a) from urban but stagnant Indus valley culture, through (b) Aryanization, (c) clearing and settlement of the heavily forested Gangetic alluvial plain, (d) a 'primitive' feudalism (d) 'pure' feudalism, (f) 'modern capitalism, culminating in the rule of a new indigenous bourgeoisie that came into being less than 100 years ago through European trade, factory production and share capital, under British colonial rule'.[55] Kosambi's writings were thus singularly devoid of making use of Ancient, Medieval and Modern in the conventional ways of periodizing Indian history, at a time when research, and historical consciousness, were rooted in the acceptance of this premise of historical periodization. Kosambi's alternative chronological scheme was related to his own concept of what constituted major historical change, and ultimately, to his redefinition of the scope of Indian history.

Kosambi's other pioneering idea, which was in his conception of the power of ideology, followed from his attempts to answer this query: 'It is therefore reasonable to inquire what it was about India that was characteristic, to ask ourselves wherein the history of India *differs* (emphasis in the original) from that of other countries'.[56] The answer, to Kosambi, lay in the power of ideology. This is not the same as underlining, as many do, the much-published religiosity of the Indians or producing specialized tomes on Indian religions and philosophies. It, on the other hand, meant understanding how ideology bore upon relations between disparate groups in society, how it acted as an integrative mechanism, strengthening at the same time the basis of inequality:

> A change of the utmost historical importance is in the relation of the ideological superstructure to the productive basis, . . . without these superstitions assimilated by Brahminism at need, . . . tribal society could not have been converted peacefully to new forms nor new savages changed into helpless serfs—though peace between tribes . . . and a change from hunting or pastoralism to agriculture guarantee a decidedly more secure livelihood for the tribesmen. Only an imposing ritual, or overpowering force, or modern socialism could have won the savage over. The Indian method reduced the need for violence to a minimum by substitution of religion; caste or the *smritis* adopted or replaced totem or tabu with more power than the sword or bow.[57]

Elsewhere, he wrote:

> India has a unique social division, the (endogamous) caste system. *Caste is class at a primitive level of production, a religious method of forming social consciousness in such a manner that the primary producer is deprived of his surplus with the minimum coercion.* (emphasis in the original). This is done with the adoption of local usages into religion and ritual, being thus the *negation* of history by giving fictitous sanction from 'times immemorial' to any new development, the actual change being denied altogether. To this extent and at a low level of commodity production, it is clear that an *Asiatic Mode did exist* (emphasis in the original), reaching over several stages; at least, the term is applicable to India, whatever the case elsewhere.'[58]

It may appear extremely strange to find Kosambi here endorsing the notion of the Asiatic Mode of Production,[59] which he so vehemently opposed in the slightly later *Introduction*, but it was Kosambi's understanding of the power of ideology which was at the root of this contradiction, perhaps in a sense an admission of his own difficulty to achieve conceptual resolution between change and 'negation of history'. In understanding Kosambi's historiography one cannot gloss over this contradiction; it is this tension rather than facility of conviction that lies at the root of all radical thinking.

The radicality of Kosambi's vision of Indian history and culture—no matter how his many formulations are viewed today—can perhaps be measured by the distance we continue to maintain from it. Today, Kosambi's basic 'non-Aryan' preliterate foundations of Indian culture, conceptualised from the use of ethnographic data, field observations and archaeology, are far from integrated into our textbook versions of Indian history. The archaeology—history divide still largely holds valid, with professional archaeologists withdrawing more and more into their specialization grooves and increasingly mistrustful of historians using their material. The tyranny of conventional periodization still seems to suit the convenience of the professional historian, the growth of fundamentalist strain in contemporary thought continuing to derive legitimacy from this periodization. The sustenance and further advancement of radical thought are dependent upon continuing to respond to its core premises; responses to the core of Kosambi's work have been rather negligible so far.

V

Kosambi's history is not really separable from his overall personality and the style in which he wrote, and I would like to close my endeavours to understand his writings by trying to understand, however inadequately, how the links between them can be explored. Kosambi's Marathi biography, reminiscences about him, as well as Kosambi's own brief references to himself, bring out the formative character of his Harvard years. The impact was not simply academic, but on the formation of some of the basic traits of his personality: his espousal of the cause of the 'underdog'; total loyalty where loyalty was due; and despite his much-publicized conceit[60] and sharp tongue,[61] his known preference for the 'town' to the 'gown', his being more at home with the community of the children of factory and office workers than with students of the 'gown'. He was perhaps in some measure a victim of white racism in America because of his brown skin and 'Jewish nose', and the denial of a scholarship to him during the depression years despite his brilliant results, depriving him of the opportunity to pursue his Ph.D., may have strengthened his anti-racist convictions.[62] His love of Negro pastorals and of Paul Robeson are evidence too of the way his ideological convictions were being formed at this stage.

Kosambi's admiration for Mahatma Gandhi has been mentioned already. In America, his heroes were George Washington and Abraham Lincoln.[63] In India, he gradually turned to Marxism, although one does not really know how,[64] and when it was politically risky to do so, he dedicated, in 1948, his critical edition of the *Śatakas* of Bhartṛhari to Marx, Engels and Lenin, 'the vanguards of the new human society' *Nūtan-amānava-samājasya-puraścarānāṃ-Marx-Engels-Lenin-nāmadheyānāṃ tejasvināṃ mahāmānvānāṃ punītasmaraṇārtham).*[65] His scholarship too was a part of his convictions which could mean combining research in all seriousness with taking up relief operations around the time of India's independence and partition or at the time of the devastating Pune floods of 1961. Kosambi's involvement in the International Peace Movement which he espoused passionately is well known; it was, however, not simply an ideological response; it was based on a full understanding of the real dangers of nuclear weapons programme:

> A flimsy 'Indian Report' on the effect of atomic radiation shows our low moral and scientific calibre by ignoring the extensive data compiled since 1945 in the one country which has had the most painful experience of atomic radiation applied to human beings—Japan. The real danger is not death, which is release for most Indians, but genetic damage to all humanity.[66]

Kosambi's social concerns, backed by academic homework, extended to such diverse areas as overpopulation and birth control, fertilizers, solar energy and reforestation ('indispensable for good agriculture'), and water-harvesting for purposes of irrigation:

> Neither the engineers, nor the Planning Commission, would consider a more important suggestion, namely, that many cheap small dams should be located by plan and built from local materials with local labour. Monsoon water would be conserved and two or three crops raised annually on good soil that now yields only one. The real obstacle is not ignorance of technique but private ownership of land and lack of cooperation among the owners.[67]

The reality however was thus very different from what he wanted it to be. He was impatient with the reality as he perceived it, and with human failures resulting from superficiality, inefficiency and hypocrisy. The sharpness of Kosambi's style, one aspect of which was perhaps euphemistically referred to by A.L. Basham as 'concise'[68] was really a reflection of his impatience with what he found unbearable: be it in the understanding of Marxism or its applications, squabbles even over such noble movements as peace movement or in bureaucratic unconcern. How bitter his critique could be can be seen from what he wrote to Daniel Ingalls on the question of the distribution of research grants:

> What you say about the grant comes painfully home in several ways. Our fertile but whimsical *Kāmadhenu*, the government, can be milked for streams of cash, if one does it on a sufficiently large and useless scale. The man who needs 500 for some really useful work is a common swindler; a scheme for 10,000 might get through with heavy backing. In the hundred thousands it becomes routine; and by the million, you not only get everything you ask for, but are certainly a public benefactor, provided the money all goes down the drain.[69]

If this was one, bitter, side of human sensitivity, then there was also the other, the unexpectedly soft core, where Kosambi's style of expression—in his behaviour towards his young associates with whom he could spend hours teaching Greek history or undertake arduous archaeological explorations over difficult terrains, in his closeness to his family or in his touching loyalty to friends—found outlet in a different kind of language altogether. Contrast the tone of the above letter with the last lines of the Introduction to a book which he dedicated to his mother:

> At a time when my health and finances were both ruined, and the work would have been suspended, she put at my disposal, unsolicited, the meagre savings of a lifetime devoted to the service of her children. To these funds, given without condition in the disappointed hope that I should use them to improve my health, this edition owes its very existence. A matron in the noblest Indian tradition, one to whom even Bhāsa's broken hero of the shattered thigh, abandoned on the field of battle, might pray with his dying breath, 'If merit be mine and rebirth fall to my lot, be thou again my mother', she deserves to have a far better work dedicated to her, just as she deserves a far better son. However, if she will condone the shortcomings of the book as she has those of the child, both are hers.[70]

A rational idealist, with deep human compassion within, is usually ultimately a broken man. Kosambi's ideals obviously were going to remain unrealized. He withdrew from the peace movement, but his fierce opposition to the nuclear programme resulted in tensions, of which his job was probably a casualty.[71] Being finally nominated a Scientist Emeritus of the Council of Scientific and Industrial Research, after squabbles of the nature of academic politics, was no major compensation. Field work sporadically continued till the early sixties, but problems of finance, logistics and those caused by nagging arthritis combined to make things difficult for him at the late stage of his life.

But, what one can be sure about is that Kosambi would never have fallen in line with Bhartṛhari, the poet he continued to study so thoroughly till the end: anti-elitist Kosambi's impatient comments on Bhartṛhari's despair born out of poverty would only be: '. . . this is poverty of the intelligentsia; not of the proletarian, the *pāmara* who has nothing to live by except the hard labour of his scabby body; with him the poet feels no kinship . . . Our poets had long past the stage when they would burst into song for the sheer joy of being alive.' In his assessment, 'the florid Sanskrit poet or his hedonist patron' compares unfavourably with Bunyan's valiant pilgrim: 'For him, death had no sting, over him the grave could claim no victory'; only those prepared to put up 'constant struggle' would be capable of demanding, in the words of another of Kosambi's favourite poets, Blake:[72]

Bring me my bow of burning gold!
Bring me my arrows of desire!
Bring me my spear! O clouds unfold!
Bring me my chariots of fire!

'This is the best of all possible warfare, the only one for a poet', Kosambi wrote. In retrospect, one feels that one can say this about a scientist-social scientist too, if one can get to the heart of Kosambi's warfare.

NOTES

1. Dale Reipe, 'D.D. Kosambi: Father of Scientific Indian History' in R.S. Sharma and V. Jha, eds, *Indian Society: Historical Probings: In Memory of D.D. Kosambi* (People's Publishing House, Delhi, 1974), pp. 34–44.
2. Romila Thapar has used this expression in her 'The Contribution of D.D. Kosambi to Indology', included in her *Interpreting Early India* (Oxford India paperbacks, Delhi, second impression, 1994), pp. 89–113 [hereafter 'The Contribution of D.D. Kosambi'.]
3. To my knowledge, Romila Thapar's 'The Contribution of D.D. Kosambi' remains the only analytical overview of his writings so far. For a review of Kosambi's *Culture and Civilization of Ancient India in Historical Outline* (Routledge and Kegan Paul, London, 1965) see D.N. Jha, 'A Marxist view of Ancient Indian History', in his *Economy and Society in Early India: Issues and Paradigms* (Munshiram Manoharlal Publishers Pvt. Ltd., Delhi, 1993), chap. 2.

See also idem, 'D.D. Kosambi' in S.P. Sen, ed. *Historians and Historiography in Modern India* (Calcutta, 1973), pp. 121–32.

4. It seems that this is what Kosambi was being accused of towards the end of his career as Professor of Mathematics at the Tata Institute of Fundamental Research, Mumbai. See the reminiscences section in *Science and Human Progress: Essays in Honour of Late Professor D.D. Kosambi* (Popular Prakashan, Bombay, 1974), p. 16.
5. D.D. Kosambi, 'Adventure into the unknown', in K. Satchidananda Murty and Ramakrishna Rao, eds, *Current Trends in Indian Philosophy* (Asia Publishing House, Waltair, 1972), pp. 158–9.
6. This information has been gathered from a careful reading of reminiscences about him in *Science and Human Progress* and from his Marathi biography by Chintamani Deshmukh, *Damodar Dharmananda Kosambi (Jīvan āṇi Kārya)*, (Mumbai, 1993).
7. *Science and Human Progress*, p. 319.
8. 'Acknowledgments' in J.L. Masson and D.D. Kosambi, tr. *Avimāraka: Love's Enchanted World* (Motilal Banarsidass: Delhi-Patna-Varanasi, 1970).
9. *Science and Human Progress,* p. 319.
10. (a) *Śatakatrayam of Bhartṛhari* (The Southern Archetype of the three centuries of Epigrams Ascribed to Bhartṛhari), for the first time edited by D.D. Kosambi, with an anonymous Sanskrit commentary edited by Pt. K.V. Krishnamoorthy Sharma (Bharatiya Vidya Bhavan, Bombay, 1946) (hereafter *Bhartṛhari*, 1946); (b) *Bhartṛhari-viracita-śataka-tray-ādi-subhāṣita-saṃgrahaḥ* (The Epigrams attributed to Bhartṛhari, including the three centuries for the first time collected and critically edited with principal variations and an Introduction) by D.D. Kosambi with a Foreword by Acharya Muni Jina Vijaya (Singhi Jain Series, no. 23, Bombay 1948) (hereafter *Bhartṛhari,* 1948).
11. Chintamani Deshmukh, pp. 34–5.
12. An essential reading for understanding what Kosambi was trying to achieve through his fieldworks is 'Pilgrim's Progress: A contribution to the Prehistory of the Western Deccan Plateau', in his *Myth and Reality: Studies in the Formation of Indian Culture* (Popular Prakashan, Bombay, 1962), chap. 4.
13. In addition to *Bhartṛhari* 1946 and *Bhartṛhari* 1948, Kosambi was associated with the following other publications on Bhartṛhari: (a) *The Śatakatrayam of Bhartṛhari with the Commentary of Rāmarṣi,* edited in collaboration with Pt. K.V. Krishnamaoorthy Sharma (Anandasrama Sanskrit Series, no. 127, Poona 1945), (b) *Śrī Bhartṛhari-Yogīndra-Viracita-Subhāṣitatriśati,* revised with the help of D.D. Kosambi and others (Nirnaya Sagar Press, Bombay, 1957).
14. *The Subhāṣitaratnakoṣa compiled by Vidyākara*, edited by D.D. Kosambi and V.V. Gokhale, with an Introduction by D.D. Kosambi (Harvard Oriental Series, vol. 42), (Harvard University Press, Cambridge, Massachusetts, 1957).
15. Daniel H.H. Ingalls, 'My friendship with D.D. Kosambi' in R.S. Sharma and V. Jha, eds. *Indian Society: Historical Probings,* p. 26.
16. Kosambi's admiration for quality extended beyond narrowly defined academic world. Referring to the works of Sunil Janah, some of whose photographs of

tribal life he chose for inclusion in his *Culture and Civilization*, he wrote in a letter: 'I have every hope of getting a few magnificent shots from Sunil Janah, a real artist with the camera, who has a superb collection of tribal photos. Incidentally, if you know anyone in Germany who wants to publish photos of Indian tribal people as a book by itself, Janah is the man to contact.' Letter dated November, 1963 to G.D. Sontheimer of Heidelberg University. I am grateful to the memory of late Professor Sontheimer who had allowed me to photocopy and use the letters written to him by Professor Kosambi.

17. First published by Popular Book Depot (now Popular Prakashan), (Bombay, 1956).
18. (Popular Prakashan, Bombay, 1962).
19. (First published by Routledge and Kegan Paul, London, 1965).
20. On 13-2-1965 Kosambi was writing to G.D. Sontheimer; 'The *Lekhapaddhati* in the GOS is out of print, as you know; we have the basic MSS right here at he BORI [Bhandarkar Oriental Research Institute], but the Gujarati words need closer explanation, not fully given in the GOS [Gaekwad Oriental Series] edition. I hope they will have a better edition soon, but no one actually worries about such matters nowadays.'
21. 'Combined Methods in Indology' (no. 1. The number corresponds to the serial number of the article in this volume), p. 4.
22. *Myth and Reality*, p. 2.
23. In his critique of D.A. Suleikin's note on periodization of Indian history Kosambi wrote: 'India is not a mathematical point but a very large country, with the utmost diversity of natural environment, language, historical course of development. Neither in the means of production nor in the stages of social development was there overall homogeneity in the oldest times. Centuries must be allowed to pass before comparable stages of productive and social relationships may be established between the Indus Valley, Bengal, and Malabar. Even then, important differences remain which makes periodization for India as a whole almost impossible except with the broadest margins', 'On a Marxist approach to Indian chronology' (no. 3).
24. *Culture and Civilisation*, p. 10.
25. See the sections 'Primitive survivals in the means of production, Primitive survivals in the superstructure' in chap. 2 of *Culture and Civilisation*
26. 'Combined Methods in Indology'.
27. Ibid.
28. Kosambi was not unconcerned about the technical requirements of archaeological training, which could be acquired in properly equipped institutions alone. In a letter to V.N. Sisodia, one of the young fieldworkers associated with Kosambi and later a student at the Institute of Archaeology, London, Kosambi wrote on 16 October, 1963: 'By all means concentrate upon new techniques like soil analysis. Pollen does very well in Denmark, with peat bogs for example; but what will work in India I don't know. The best indicator in this area is the impregnation of the soil with lime absorbed from below (Deulgao Gada, Coraci Alandi); also some peculiar whitening of microliths, perhaps also due to such absorption. If these could be used in some way for dating, all the better'.

29. Letter to G.D. Sontheimer of the University of Heidelberg, who had done some field work with Kosambi in the Pune area and whose subsequent researches on the folk deities of the Deccan came to be based on regular fieldworks, recording of oral traditions and written texts. In another letter to him, dated May 24, 1962, Kosambi had written: 'The old methods for Indology will simply not do; without fieldwork the literary sources will not convey any real meaning. You must have realised that for yourself by now, but have the senior scholars?'
30. Kosambi's position on this should be clear from a perusal of his article 'Stages of Indian History' which was published in *ISCUS: Journal of the Indo-Soviet Cultural Society,* vol. I, no. 1 (1954). Beginning with a long extract from Marx's preface to the *Critique of Political Economy*, Kosambi goes on to state: 'The quotation from Marx normally ends with the sentence "In broad outline the Asiatic, ancient, feudal, and modern bourgeois modes of production can be designated as progressive epochs in the economic system of society." This is quoted without change in Lenin's famous essay on Marx. J.V. Stalin, however, in his classic *Dialectical and Historical Materialism* says: "Five main types of relations of production are known to history; primitive communal, slave, feudal, capitalist and socialist." Why this difference? . . . there is only one real change in Stalin's presentation, namely omission of the Asiatic mode. Whether deliberate or inadvertent, it seems to me neither correct nor trivial.'
31. *Culture and Civilisation,* p. 10.
32. Kosambi was skeptical about orthodox Marxist Indologists' willingness to accept his approach; he was apprehensive of the kind of reception his *Culture and Civilisation* would receive from a well-known Marxist Indologist of East Germany, because in his book there was 'no mention of the great authorities on Indian history (or anything else), namely Marx, Engels, Lenin' (letter dated 7-6-1965 to G.D. Sontheimer).
33. *Culture and Civilisation*, p. 10.
34. 'Marxism and Ancient Indian Culture', (no. 48).
35. p. 24.
36. See his remark on p. 10 of the *Introduction:* 'What Marx himself said about India cannot be taken as it stands.'
37. 'Marxism and Ancient Indian Culture'.
38. *Introduction*, p. 13.
39. There is no reason why the processes underlined by Kosambi should not be valid in relation to regions for which he did not provide much material. To give one example, Kosambi suggested: 'Divine marriage, acquisition of a family or entourage, and successive incarnations are theological manifestations of social fusion. Such parallel changes in society and religion were repeated in different localities. The apparently senseless myths so illogically put together in our Purāṇas have a peculiar basis in reality', 'Pilgrim's progress: A contribution to the Prehistory of the Western Deccan Plateau', *Myth and Reality*, p. 110. See in this connection a recent study: David D. Shulman, *Tamil Temple Myths: Sacrifice and Marriage in the South Indian Śaiva Tradition* (Princeton University Press: Princeton, 1980), chap. 4.
40. 'On a Marxist approach to Indian Chronology' (no. 3).

41. 'Marxism and Ancient Indian Culture'.
42. On the supposed identity of the builders of Harappa and the Aryans, Kosambi's comment was: 'Most histories of India begin with these ancient Aryans. Some writers still maintain that the Indus people must have been Aryan, from the prejudice that every peak of Indian cultural achievement must have been Aryan. The hideous racial implication given to 'Aryan' by the late Nazi regime and its official philosophy has increased the confusion . . . The outstanding Aryan feature, the one characteristic that justifies the name for a large group of people, is a common family of languages . . . The main question is: Does the community of language or a common origin for the group of languages justify the conclusion that there was an Ayan race or an Aryan people? It is difficult to believe that blond Scandinavians and dark Bengalis belong to the same race, however loosely defined the term 'race' may be. Some excellent linguists therefore concluded about a century ago that it was as ridiculous to speak of an Aryan race as of a 'bracycephalic' grammar!' *Culture and Civilisation*, p. 73. Kosambi also clearly demonstrated the difference between the *Ṛgveda* and later strata of Vedic texts.
43. 'On the development of feudalism in India', (no. 51)
44. For example, of the Peshwas of the eighteenth century, Kosambi wrote: '. . . the basic mode of production was as feudal as anywhere else in India, whether Muslim or Hindu', *Introduction*, p. 338.
45. *Introduction*, pp. 274–5.
46. *Introduction*, pp. 344–5.
47. 'Stages of Indian History'.
48. 'The Basis of Indian History'.
49. What Kosambi was repeatedly trying to stress, in trying to get away from routine historiographical agenda which had emerged in response to the west, was: 'What most observers miss is the *reciprocal* influence of tribesmen on the Indian peasant and even on the upper classes', *Culture and Civilisation*, p. 44.
50. In assessing Kosambi's archaeological fieldwork one cannot just refer to his various formulations as either infallible or faulty, but to the fact that he was meticulously recording the contemporary as well as the historical contexts in which the artefacts were located. The documentation included current meanings of artefacts, monuments and cult centres and the traditional products of the area Note in this context Kosambi's article on the staple grains of the Maharashtra region. Kosambi was careful too to distinguish between old functions of artefacts and their current uses and thus of the limits of ethnoarchaeology; referring to the Dhangar custom of castrating sheep and goat by freshly made chips of chalcedony, he pointed out that 'the prehistorical technique was far more delicate, but prehistoric microliths are not recognised as artifacts or tools by modern Dhangars', *Myth and Reality*, p. 42. His archaeology essentially involved study of the total contemporary context, and he thus continued to be critical of those archaeologists who would laugh 'at the idea that one could learn something from potters, tanners and Dhangars' (letter dated 29-1-1965 to G.D. Sontheimer). One should also note here the distinction that Kosambi made, in

his review of F.R. Allchin's *Piklihal Excavations* and *Neolithic Cattle-Keepers of South India: A Study of the Deccan Ash-Mounds*, between 'field archaeology' and 'site archaeology' (no. 53).

51. 'What Constitutes Indian History?' (no. 49).
52. 'Stages of Indian History'.
53. Kosambi's assessment of Muslim rule was in the following terms: 'The main contribution was to sweep off certain decadent forms of relations of production; this revealed the real prop of the class-state as force, not religion,' *Introduction*, p. 341.
54. 'The Basis of Ancient Indian History'.
55. 'Stages of Indian History'.
56. Ibid.
57. 'The Basis of Ancient Indian History'.
58. 'Stages of Indian History'.
59. It should be noted that in the same article he talks of 'Primitive' feudalism and 'Pure' feudalism.
60. Even his father is said to have made this remark about Kosambi: 'His ego is greater than himself', Chintamani Desmukh, p. 51.
61. In a style which is typical of him, Kosambi refers to his annual visits to his ancestral village in Goa in his childhood when his grandmother would seat him on her lap, and 'in the presence of such of the household as were at home . . . put sugar into my mouth with a benediction that my words might be sweet. Those who witnessed this charming, ridiculous, now forgotten observance feel, judging from the results, that she did not use enough sugar', *Introduction*, p. 351, fn.
62. *Science and Human Progress.*
63. Information from Dr D.S. Chavda.
64. From his Marathi biography, it appears that Kosambi used to discuss Marxism with a select number of students and members of faculty at Aligarh.
65. *Bhartṛhari*, 1948.
66. 'Adventure into the unknown'.
67. Ibid.
68. A.L. Basham, ' "Baba": A personal tribute', in R.S. Sharma and V. Jha, eds *Indian Society: Historical Probings*, p. 16.
69. D.H.H. Ingalls, 'My friendship with D.D. Kosambi', Ibid., p. 27.
70. *Bhartṛhari*, 1946.
71. Kosambi 'retired' from the Tata Institute of Fundamental Research at the age of 55. Apparently, this was because of his work as an amateur Indologist at the expense of his mathematical research. Curiously, his mathematical manuscript 'Prime numbers' sent to the publishers remains unpublished. Also unpublished is a book he wrote for children titled 'The hump on Nandi's back'.
72. 'Introducing Vidyākara's *Subhāṣitaratnakoṣa*' (no. 43).

SECTION I

Concerning Method

1

Combined Methods in Indology*

This note suggests that the linguistic study of problems of ancient Indian culture would be more fruitful if supplemented by intelligent use of archaeology, anthropology, sociology and a suitable historical perspective.[1] Available Indian data in each of the fields listed need to be augmented by a great deal of honest and competent field work. None of the various techniques can, by itself, lead to any valid conclusion about ancient India; combined operations are indispensable.

1. *Preliminary*

The main idea back of the suggestion is that people who live alike tend often to act and to think alike, especially if their historical development has followed parallel courses. Indian peasants in villages far from any city live in a manner closer to the days when the Purāṇas were written than do the descendants of the Brahmins who wrote the Purāṇas. A stage further back are the pitiful fragments of tribal groups, usually sunk to the level of marginal castes; they rely heavily upon food-gathering and have the corresponding mentality. The existence of such differences is ignored by the Indian intelligentsia, to the detriment of its reasoning. In the judgment of Louis de la Vallée Poussin:[2] 'Les savants de l'Inde sont excellents pour la lecture des textes, l'étude des dates, etc. Mais quelques-uns sont bien les neveux des philosophes bouddhistes ou brahmanisants. A ceux-ci toute explication est bonne dès qu'elle est spécieuse, et ils jouent avec des abstractions du second degré comme avec des réalités concrètes'. This criticism, unfortunately too true, applies not only to

**Indo-Iranian Journal*, vol. 6 (1963), pp. 177–202; reprinted in *Science and Human Progress*, Professor D.D. Kosambi Commemoration Volume (Bombay: Popular Prakashan, 1974).

Indian savants. The Brahmanizing tendençy has seriously affected many distinguished foreign scholars whose long and exclusive concentration upon Brahmin documents seems to have impaired their ability to distinguish between myth and reality.

One consequence of such neglect may be seen in the formulation of 'Hindu' Law. This type of jurisprudence is mainly Brahmin traditional usage on property rights and inheritance. The *smṛti* injunction (*Ms.* 8.41) that judicial (*dharma*) decisions were to be given only after due consideration of the particular law and the usage of the region, caste-group and family group, guild, etc., was apparently followed for a long time.[3] However, no written record exists of any cases tried under this heterogeneous system. No attempt was made even by the British to study and collate the various caste laws carefully as a preliminary for Indian common law. New forms of property were regulated under the foreign (British bourgeois) law; crime by an arbitrary penal code. The caste *sabhās* continue to function off the record, with diminishing force and powers. When the question of Hindu widow remarriage was being violently argued by reformers at the beginning of this century, even the most scholarly (like R.G. Bhandarkar) looked only to correct interpretation of the sacred texts, from the *Ṛgveda* down. That 85 per cent of the population in their immediate locality allowed widows to remarry (and permitted divorce when either party felt aggrieved) made no impression upon the scholars nor upon the authorities on Hindu Law. P.V. Kane's monumental history[4] of the *Dharmaśāstra* meticulously restricts the discussion to *smṛti* documents, avoiding any disagreeable contact with anthropology, sociology, or reality. This tunnel vision persists in all disciplines concerned with Indology.

Field work has one disadvantage for arm-chair linguists. The amazing deftness with which world-shaking conclusions can be drawn without moving out of the study becomes less serviceable. I was told by a good linguist that the rather unusual Marāṭhī village name of Gomāśī (gad-fly or cattle-fly) has its obvious etymology. The villagers, however, usually speak of the place as *goam*, shortened from *go-ama*. The actual spot so designated is a small cave near the village with a fine sixth-century image of Buddha, also unique for the region. Gotama Buddha had become Gotama *ṛsi* for local Brahmins and the villagers follow the Prakrit form *goama* (+*isi*). Gomāśī can thus be traced step by step to *gotama—ṛsi*, though the derivation at one jump seems to contradict accepted rules. The village name Pāsaṇe is pronounced in half a dozen different ways within a range of twenty miles. The last syllable can vary, as in peasant Marāṭhī, from *ṇa* to *ṇe*, while the *sa* becomes a cerebral *ca* or the dental *ta*, for reasons that could not be discovered. Learned theses on Marāṭhā continue to be written as if such difference did not exist; as if the rustic speech of Sātārā district were not markedly different from that of the adjoining Koṅkaṇ. In Goa it was possible in 1925 for a keen ear to emulate Bernard Shaw's Pygmalion-Higgins and to locate a person's origin within five miles merely by his or her speech, which also gives away the speaker's caste or religion, status, profession and educational accomplishments to an observer who knows the locality.

This diversity raises a natural question about the language of Aśokan edicts. The local varieties have been determined by philological analysis;[5] the text of the same edict is not absolutely identical in different localities. This caused T.W. Rhys Davids[6] to declare that: 'The Buddha and his followers adopted . . . the particular form of this common speech . . . that was current in Avanti'. Does the Pāli canon represent the idiom actually in the Buddha's mouth, through a collection made from oral tradition some two centuries after his death? The Buddha's strict injunction to his disciples to preach in the languages of the common people is either ignored or taken to mean that the said languages differed by no more than the various versions of the same edict. The discovery of the Shar-i-Kuna[7] (Kandahār) edict in Greek and Aramaic (without a Māgadhī equivalent), a brief résumé of the standard Aśokan declarations, changes the picture. It is difficult to believe that Greek and Aramaic were then the two languages of Afghanistan, though they were undoubtedly the two major languages and scripts which would reach the great majority of literate people passing through Kandahār. Aśokan Prakrit and Brāhmī have to be given the same position in the greater part of India, a country where the language must then have changed from one small valley to the next as it does in Assam today. The decrees were promulgated by the emperor, but the rescripts circulated by his predominantly Magadhan secretariat. It is not plausible that spoken Māgadhī had then so little inner variation as the pillar and rock texts show. During a walk of twenty miles in Goa, 'want to go' changes from *jāūmka hoyo* to *vacūmka jāya*, while another twenty miles in the same direction reduces it to *vacakā*; this is for peasants of the same caste and status who manage nevertheless to understand each other. Patañjali[8] gives local usage in spoken Sanskrit (not different languages) of his day: 'goes' was *śavati* in Kamboja, *hammati* in Surāṣṭra, *raṁhati* in the east (the Gangetic regions), but *gamati* for 'real Aryans'. Yet Sanskrit then possessed the standardization of an extensive literature, the scriptures being committed to memory without alterations of a single syllable or accent. In both cases, the reported variation is much greater than for the official Prakrit of Aśoka. The analysis of the latter cannot therefore be put upon the same footing as the comparison of early Greek epigraphs, say Ionian, Attic, Doric and Cretan linear B. These were issued by independent local authorities in a land where the profusion of written contracts and registers afforded a striking contrast with India—where the natives' honesty and truthfulness in the absence of written agreements astounded Greek observers.[9] The Prakrit spoken by different characters in the *Mṛcchakaṭika* has been separated into varieties labelled with local names. But even the *Mṛcchakaṭika* Caṇḍālas use a Prakrit easily understood by the rest, while the Caṇḍālas of the *Jātakas* spoke a language among themselves incomprehensible to 'Aryans'. The parallel is with the idioms used by a Welsh or Irish character in a modern English play as against the actual Welsh language or Erse. Though the variation is decidedly less than one would expect from Patañjali, the use of Prakrit is more natural in this particular drama than in other Sanskrit plays. Here, the Sūtradhāra declaims in Sanskrit to the audience, but lapses into Prakrit with his own womenfold; much as educated Goans who consider Portuguese or Marāṭhī to be their real language speak Koṅkaṇī to women and servants. No other Sanskrit drama makes so great a concession to everyday life, just as none other deals with a historical in preference to a mythical episode. Literary Prakrit with all its varieties had become standardized, five centuries after Aśoka. The presumption is strong that the observed variation in Aśokan Prakrit is due to clerks and officials of the secretariat rather than to common local usage; very few of the original inhabitants of Maski in Mysore could have mastered the Magadhan tongue.

In modern science, it has been recognized that the variation is a very important characteristic of the material, particularly when dealing with living organisms. Fundamental methods developed by R.A. Fisher[10] and others for taking such variation into mathematical account have led to great advances in biology. But I have yet to see any recognition of the philosophical principle, let alone the use of delicate statistical tests, in Indology. Still worse, most of our field work is done by educated men who often miss significant features or impose their own views upon the observed. In particular, the world of the women with its secret rites exclusively the property of female members of the group and the inevitable archaisms that mark the speech of the women when trade and intercourse with strangers is a male prerogative—all these inevitably escape observation, especially when the ritual has not been written down and the language not standardized by formal education.

2. *Ibhya*

India is a country of long survivals. It is known that the Buddha's birthplace was the sacred grove of a Mother-goddess still worshipped at the spot under the same name after two and half millennia; but the Śākyas and Buddhism have vanished from the locality. Literate Mahārāṣṭrians use the word *leṇe* (= *layanam*) for a monastic cave, originally excavated as a retreat, and referred to in Sātavāhana inscriptions under essentially the same name. To the peasantry near Karle caves the natural term is *veher* (often pronounced *vyahar*), from the Buddhist *vihāra*, which the caves actually were for centuries. Surprisingly enough, the term changes at Karhāḍ (the ancient Karahāṭaka) where the (sixth century AD) Buddhist caves are called *vavri*, an archaic Sanskrit word whose filtering down to the lowest stratum of the population can only be explained by the strength of the Brahmins at Karhāḍ. The peasant dialect about Karhāḍ is otherwise not more influenced by Sanskrit than elsewhere in Mahārāṣṭra. The caves were carved out by a class of people intimately connected with the Brahmins of a great trade centre.

These survivals naturally lead to the view that there has been no real change in India over the ages. Among the more stupid displays may be mentioned A.A. Führer's publication[11] of a photograph of Tharu tribesmen near the Buddha's birthplace as modern Śākyas, though there was nothing whatever in the tribal name or legends to indicate the equivalence. Fa-hsien's account[12] showed that by the fourth century AD, the Śākyan capital was virtually deserted. By the time of Hsuan Tsang in the early seventh century, a Buddhist revival seems actually to have relocated Kapilavastu several miles away from its original site,[13] if the two travellers' accounts (so accurate in detail) are to be reconciled. How many tribes (before the Tharus) wandered over the Śākyan *janapada* remains unknown. This 'timeless unchanging East' theory may insidiously distort the entire meaning of a document and thus reduce the value of our already meagre source material. For example:

Ṛgveda 1.65.7 describes the fire-god Agni: *ibhyān ná rājā vánāny atti* 'As a king the *ibhyas*, so eats he (Agni) up the forests'. K.F. Geldner[14] translates this as 'Wie der König die Reichen frisst er die Hölzer auf'. The footnote to this gives an alternative: 'Oder: Wie ein König seine Vasallen'. Sāyaṇa commenting on the same *ṛk* gives *ibhyā śatravaḥ . . . yad vā dhaninaḥ; tān yathā dhanam apaharan rājā hinasti tadvat.* Thus, Geldner has taken the second of Sāyaṇa's alternatives for a word that occurs just once in the whole of the *Ṛgveda*. That this did not entirely satisfy seems clear from his note on *RV.* 9.57.3 *ibho rājeva suvratáḥ*. The footnote here reads:

'Die Verbindung von *ibha* (*ibhya* mit *rājan* 1.65.7; 4.4.1 und hier) ist für beide Wörter bedeutsam und harrt noch der sicheren Lösung. Andererseits ist die Bedeutung 'Elefant' für *ibha*, 'reich' für *ibhyā* durch das spätere Sanskrit (*rājā ibhena* Manu 8.34!) so gesichert, dass sie kaum zu umgehen ist. *ibhya* wird sich zu *ibha* verhalten wie *dhányа* zu *dhána*. Pāli *ibbha* in der bekannten Formel (s.P.D.) und *ibha* in *Chand. Up.* 1.10.1–2 sind aus dem Zusammenhang nicht mehr sicher zu bestimmen . . . Lehnt man aber die klassische Bedeutung für den Veda ab und sucht den Sinn in der von Roth gewiesenen Richtung, so empfiehlt sich statt 'Gesinde, Hörige' (Roth)vielmehr für *ibha* und *ibhya* 'Vasall'. *ibho rājā* wäre dann der Vasallenkönig'.

This is a valiant attempt made by a scholar of merit to settle the meaning of a unique term in a document which he had studied intensively for so many years. The basic question is whether *Ṛgvedic* society had kings who ruled absolutely over vassals and over elephant-owning noblemen. It would seem extremely unlikely, taking the hymns as a whole. On the other hand, if the meanings of *ibhya* could be more closely determined, a certain amount of history emerges from the verse in question. The matter could have been settled by Aśoka's 5th Rock Edict which is clearly legible for the relevant portion at Dhauli, Shahbazgarhi, Kalsi and Mansehra. There, *bāmbhaṇibhesu* is beyond question an antithetic compound, like the preceding, 'masters and servants'. One should expect that the *ibbha* here would be the lowest of castes, as the Brahmin was the highest. However, the point may still be argued, and Jules Bloch,[15] for example, deliberately leaves the word untranslated, as he does every other word that might contradict the idea that Aśoka was a pious dotard bent upon preaching Buddhism. So, we might look closer at the two sources which seemed indecisive to Geldner.

The *Pali Dictionary*[16] of Rhys Davids gives *ibbha* primarily as the lowest of menials, lowest of the low. The context of the third *sutta* of the *Dīghanikāya*[17] (*Ambaṭṭhasutta*) makes it certain that *ibbha* is used as a term of abuse, to indicate the contempt in which some local Brahmins held the Śākyans as men of low lineage. This meaning fits all contexts cited, and is generally accepted. The only other meaning given by that dictionary is late, in a comment of Buddhaghoṣa on the *Jātakas*. As for the *Chāndogya Upaniṣad* reference, there seems to me no doubt of the meaning of *ibhya* in its particular context. The story is of a Brahmin Uśasti Cākrāyaṇa of the Kuru country, who was wiped out by a plague of locusts (*maṭacī-hata*; commentators prefer 'hailstorm'). At a village of *ibhyas*, he saw an *ibhya* eating *kulmāṣa* broth, begged the leavings (which his wife could not bring herself to eat, famished as she was) and from the strength gained from this distressing meal, made a success the next day at the royal sacrifice. The commentary that passes under the name of Śaṃkara gives for *ibhya* the alternatives 'rich man' or 'elephant-driver (of low caste)'; whereof Hume in his English translation takes the first. Gopālānanda-svāmī[18] in his comment gives only *hastipak* = elephant-driver for *ibhya*. Geldner may seem to appear justified in his assertion of ambiguity. But what is *kulmāṣa*? Neither lexica nor commentators make of this anything but food of the lowest grade. Whether my personal interpretation of *kulmāṣa* as the lowly vetch *Glycine tomentosa* is accepted or not, it was certainly not food for a nobleman rich enough to own elephants. The story has a point only if it shows the desperate straits to which a learned Brahmin had been reduced. Not for the first time in our records, for Vāmadeva in *RV*. 4.18.13 claims to have cooked a dog's entrails in hunger: *ávartyā śúna āntrāṇi pece*. This *ṛk* is put into Indra's mouth by Geldner, who here ignores the logically consistent Brahmin tradition reported by Sāyaṇa and by the *Manusmṛti* (10.106) to the effect that the degradation was Vāmadeva's.

Finally, what can a village of *ibhyas* (where an *ibhya* could be seen eating outdoors) mean, if not some hamlet inhabited by people of a low caste-guild? Such villages still exist. If you take *ibhya* as the equivalent of the tribal caste Mātaṅga, the modern *māṅg*, originating from people with an elephant totem, every one of the passages discussed makes sense. The Aryan king of *RV*. 1.65.7 would eat up tribal savages mercilessly. The Brahmin could take soiled food from the lowest caste only in times of unutterable famine.

3. *Sāmanta*

Naturally, this raises the question of feudalism in India: When did vassals and feudal barons as such come into existence? The Sanskrit word to be discussed is the post-Vedic *sāmanta*, meaning originally 'neighbour' or 'neighbouring ruler'. In his indispensable translation of the *Artha-śāstra*[19], J.J. Meyer generally takes this in its later meaning 'vassal'. If the translation is justified, then India was unique in having a feudal system about a thousand years before Europe, or the document is a late forgery. But no one puts the book later[20] than AD 300, and the question must be asked whether feudal barons were in existence even at that period. That *Jātakas* show *sāmanta* only as 'neighbour'; the feudal institution is absent. The few *kṣatrapas* and *mahākṣatrapas* known in inscriptions are actually or virtually independent kings. Fortunately, it is possible to date, within limits unusually narrow for India, the period when *sāmanta* acquired the meaning 'feudal baron'.

We may note that even in the *Arthaśāstra*, the word *sāmanta* has often the meaning 'neighbour', without alternative—as for example in *Arth.* 3.9 when transfer of title of houses and plots of land is in question. However, in every single case, *sāmanta* can consistently be translated as neighbour, whether royal or commoner, without incompatibility. In fact, in *Arth.* 6.1., Meyer contradicts himself by translating *śākyasāmantaḥ* at the beginning as 'Herr über seine Vasallen' and in the middle of the same chapter as 'von Grenznachbarn umgeben, die man in der Gewalt hat'. The latter translation would fit both contexts, the former would not. There is no *sāmanta* baron in the *Manusmṛti*. The earlier Guptas rule over no *sāmantas* in their inscriptions; the posthumous Hariṣeṇa *praśasti*[21] of Samudragupta on the Allahabad pillar mentions no barons. Dharasena of Valabhī who appears as the first *mahāsāmanta*[22] in AD 527 is an independent king friendly to the Guptas (from the tone of his inscriptions), not a peer of the realm. The Mandasor pillar[23] inscriptions of Yaśodharman, who drove Mihiragula and the Huns out of Mālwā, say that the king defeated and humbled all the *sāmantas*, which can only mean neighbour kings. But the Viṣṇusena charter[24] of AD 592 takes *sāmanta* only in the sense of petty feudal viscounts who might press labour for corvee, or infringe upon the rights and immunities of merchants to whom the charter was granted. Thus, the change in meaning falls within a period of less than 60 years, say the second half of the sixth century AD. It is confirmed by the Ten Princes[25] of Daṇḍin, where *sāmanta* can only mean feudal baron, though the author shows remarkably close reading of the *Arthaśāstra* as of many other works. The copper plates[26] of Harṣa, supported by Chinese travellers' accounts, prove that feudal relationships and *sāmanta* 'baron' had come to stay.

The entire structure of the *Arthaśāstra*, considered as a whole, contradicts the possibility of feudalism. The state collected its taxes in kind, but processed and made into commodities an enormous number of natural products thus gathered. The whole economy and the system of administration was based upon cash valuation, as may be seen by the minutely detailed table of fines and of salaries. Moreover, the state itself owned most of the land under the title of *sītā*, the *rāṣṭra* being still under private enterprise of various sorts though subject to imperial taxes. Neither in the mechanism of collecting taxes, nor in the administration of law and order, nor in military service is the *sāmanta* feudal officer mentioned; the respective officials are named, and have fixed monthly salaries paid in cash. The high ministerial *mantrin* and *amātya* are also salaried posts not based upon hereditary tenure or nobility of rank. A 'vassal' in the feudal sense would make the whole document logically inconsistent. As for the neighbouring rulers, the whole purpose of the *Arthaśāstra* is to make its king the universal monarch, starting on level terms with the *sāmantas*. But conquest did not mean reduction of the beaten king to vassalage; he and his officials were to be maintained in their old position. No special tribute is mentioned. The profit of aggression came to the conqueror from the development of waste land as new *sītā* plus absolute control of mineral resources as a state monopoly. The land visualised is one divided into *janapada* territories, each originally belonging to a particular tribe, say Magadha, Kosala, Videha, etc. These were separated by extensive forests infested by predatory *āṭavika* savages who were still in the food-gathering stage, difficult to conquer by military methods, or at least to conquer with due profit. In the intermediate stage were a few powerful, armed, tribal oligarchies. These had to be broken ruthlessly by every method at the king's command. There was no need or place for feudalism in any recognizable meaning of the word, in this type of state.

Not only do these considerations furnish important data for Indian history, but they also help clarify points that remain unexplained or have escaped attention. The Allahabad praśasti of Samudragupta says that he had reduced all forest kings to servitude: *paricārikī-kṛta-sarvāṭavika-rājasya*, and the context shows that this refers to Āryāvarta, the Gangetic basin, probably including West Bengal. This finished the course of settlement begun by Magadhan kings before the *Arthaśāstra*, and accounts for the new prosperity of the Gupta empire. The great forest still existed in places, e.g. between Allahabad and Banaras, but had been cleared of armed savages; its reduction to farmland was a matter of time, no longer of armed intervention. Gupta gold coinage, beautiful as it is, supplements Chinese pilgrims' accounts to show that barter economy was becoming prevalent; Harṣa's coins are so few that the economic trend seems to have been virtually complete by the seventh century AD. Other steps to feudalism were payment of officials by the income of specially assigned plots of land—impossible in the *Ṛgvedic* economy (when fixed plots did not exist) and frowned upon by the *Arthaśāstra*. The definition of the paramount ruler: *rājā tu praṇatāśeṣa-sāmantaḥ syād adhīśvaraḥ* in *Amarakośa* 2.8.2 fits only the Yaśodharman type of conqueror of neighbouring kings; *sāmanta* as 'feudal baron' would not explain the given hierarchical order: *adhīśvara, cakravartin, sārvabhauma*; but if none of these, then a *maṇḍaleśvara*. It follows that the *Amarakośa* cannot be later[27] than the first half of the sixth century AD. The tradition that places its writer at the same court as Kālidāsa seems quite reasonable so that the work may be as early as the late fourth century AD. On the other hand, I had placed the poet Bhartṛhari in the opening centuries of the Christian era, which can be disproved on our deductions about the meaning of *sāmanta*. The Bhartṛhari stanza[28] that begins *bhrātaḥ kaṣṭam aho* (or *sā ramyā nagarī* in the southern recension) takes *sāmanta* as the high noble of a royal court, and is attested by all complete manuscripts. Inasmuch as the manuscript evidence also compels inclusion of the stanza *bhavanti namrās taravaḥ phalodgamaih* which is to be found in the *Śākuntalam*[29] of Kālidāsa (whereof the critical study needs to be extended), it follows that even the nucleus of the Bhartṛhari collection contains verses composed two centuries or more apart; the archetype restored on present manuscript evidence still remains an anthology.

To round out the discussion, it can be shown that the transition from the *Ṛgvedic* to the Arthaśāstra society as we have reconstructed it was natural. The relevant documents are the various *Brāhmaṇas*, from whose diffuse liturgical contents a useful collection of data has been boiled down by W. Rau.[30] The king of this intermediate period was a small princeling, without very rich elephant-owning *ibhya* vassals. As the first among equals, he could be deposed. The move towards absolute rule unrestricted by tribal law was also evident. The ostracized (*aparuddha*) king appears again to intrigue in a somewhat more ambitious role in the *Arthaśāstra*. Production on the land was, in each locality, in the hands of people with bonds of kinship, *sajāta*; this was the only form of association permitted on the *Arthaśāstra* ruler's *sītā* crown lands, and the text has been emended to *sujāta* (high born, upper caste) by heedless editors. The correct reading is confirmed by the fact that even under the Mughals, villages were generally tilled by a *biradari* (kinship group), and undisturbed villages (e.g. in Maharastra) are still populated by people with the same clan-name, usually reminiscent of some totem (e.g. Magar, Lāṇḍage, Vājī, More). While better developed than in the *RV*., the *Yajurveda-Brāhmaṇa grāma* was still a mobile association of human beings, who moved seasonally with their cattle to and from the territory to the other; very different indeed from the fixed agricultural village of today. The meeting of two such groups on the transhumance march meant conflict, as the word *saṃgrāma* for battle proves. If, now, we take Geldner's meaning for *ibhya* and Meyer's for *sāmanta*, the *Ṛgveda*, the *Brāhmaṇas* and the *Arthaśāstra* fail to give a consistent picture of developing Indian society.

4. *Udumbara*

Jean Przyluski (*JA*. 208. 1926, pp. 1–59) describing the Udumbaras as an ancient people of the Punjab, reached the conclusion: 'On peut donc admettre que Udumbara, Odumbara, Kodumbara sont les variantes d'un même nom désignant un peuple austro-asiatique du Nord de l'Inde'. The basic theory, again in Przyluski's words, seems to be as follows: 'La répartition des populations de l'Inde avant Alexandre aurait été le résultat de trois invasions successives. D'abord les Austroasiates recouvrent en partie l'élément dravidien et ne laissent guère émerger que l'îlot brahui au Nord et les masses du Dekhan au Sud. Puis les Aryens, descendus dans l'Inde par le Nord-Ouest, s'établissent progressivement dans les vallées moyennes de l'Indus, de la Yamunā, du Gange, et rayonnent autour de ces foyers de culture brahmanique. Plus tard enfin, les Bāhlīka, venus de l'Iran oriental s'infiltrent, marchands et aventuriers, chez les tribus austroasiatiques laissées à l'écart par les Brahmanes; en organisant de vastes confédérations comme celle des Śālva et en faisant circuler de l'Ouest à l'Est leurs caravanes, ils préparent la formation des futurs empires et assurent la liaison de l'Inde et de l'Occident'.

These conclusions have caught on very well with a certain class of Brahminizing disciples, lovers of the 'explication specieuse' and 'logique imperturbable'. The Austro-Asiatics are even credited[31] with the Indus valley civilization and that of Sumer! Rather than plunge into the linguistic morass, it might be more profitable to analyze the technical details of the three supposed pre-Alexandrian invasions.

The British 'invasion' of India reached maturity in approximately two centuries. Its ultimate cultural dominance and military success rested upon superior technique of production and a social form (the bourgeois) decidedly more efficient than feudalism. The Muslim invasion took six centuries to span comparable stages. The military technique is again well known while their developed feudalism was more efficient than the priest-ridden Indian system before them. In both cases, the success was out of all proportion to the actual number of invaders. There was no question of 'submerging' the indigenous population, no matter how much Islam grew by conversion. So, Przyluski's three invasions prior to Alexander's ephemeral raid must have been much more powerful in numbers, not to speak of superiority in productive technique, military organization, and social form, relative to whatever existed in India at the time of each.

The case for the Aryans supports these contentions at first sight. The older view that an 'Aryan tribe' or 'race' is as ridiculous a combination of attribute and noun as a 'brachycephalic grammar' needs hardly be considered. Strabo talks of Aryans on the banks of the Indus in Alexander's day; Darius I claims in his grave inscription to be an Aryan of Aryan descent: *ariya, ariyaciça*. So we need hardly go into the etymology of Hariana and Iran or speculate about the Germanic Arii in Tacitus. Archaeologists tell us that Aryan technique[32] as such does not mean any special type of pottery or tool; they picked up whatever suited them while smashing through the barriers of little atrophied peasant communities in Asia Minor. The military success of the first wave, dated[33] at about 1750 BC, may be ascribed to the fast horse-chariot and a mobile food supply of good cattle. The second main wave at about the end[34] of the second millennium BC added thereto the knowledge of iron, the first cheap metal that made the heavy plough and extensive agriculture possible.

This last point, of no importance to linguistic scholars, must be properly understood. In six African animal preserves,[35] the annual 'production' of meat ranges from two tons to 34 tons per square kilometre. First class range land in Oklahoma yields 14 tons of beef per square kilometre annually; good Belgian meadowland runs to 45 tons. All this is with modern conservation and fire-arms. If the meat were to be procured by traps, pitfalls or bow and arrow, the actual yield would be much less; supplementing primitive weapons by bush fires would cause (and has elsewhere caused) great ecological changes which deplete the supply of game and therefore eventually the human population. Briefly, a change from hunting and food-gathering to a pastoral economy in suitable territory would support, say, eight times the population on the same land; plough farming could again multiply the number of people by at least as great a factor. Moreover, cattle-breeding and agriculture provide a regular food supply, where food-gathering is uncertain.

Only the Indus region and part of the Gujarat loess area could have had any farming other than primitive slash-and-burn (Brandwirtschaft) or digging-stick cultivation before iron became plentiful. The river flowing through an alluvial desert in a tropical climate is of the utmost importance. That is why we find the first civilizations in Mesopotamia, on the Nile, the Indus; not on the Amazon nor the Mississipi. Next best would be a loess corridor, as in China and on the Danube. This explains why the Ganges and Yamunā, though eventually the main centres of Brahmin culture, could not have had any significant settlements till iron became relatively plentiful—not before the eighth century BC. The first 'Aryan' settlements were in upper Punjab and along the Himalayan foothills.

Banaras is perhaps the earliest of the riparian states. Rajgir owed its position to the great ore deposits which lay close and to the south-east. The control of ore sources rather than Brahmin organization of vast confederacies explains why Magadha was the first 'universal' empire in India. The 'masses du Dekhan' did not exist. Though Paithan was the terminus of the *dakkhiṇāpatha* (southern) trade-route from Kosala, the Deccan plateau was not opened to extensive agricultural settlement till late in the sixth century BC, and could earlier have provided neither hunting nor pasture comparable to the best northern territory. The coastal strip with its terrific rainfall and heavy forest was developed after Aśoka. The pre-Aryan invasions meant at most a relatively thin scattering of stone-age people, except for the Indus valley. Even here, the light plough or harrow and flood irrigation must have been the norm; the absence of good ploughs and of canal irrigation may be deducted from the low density of ancient urban ruins in Sind and the lower Punjab as compared to Iraq.

Any preponderance of Aryans in number could only have been due to their ability to colonize lands undeveloped before their time, particularly the wooded foothills of the upper Punjab and the Gangetic basin; not that they came to India in great numbers, but that they bred faster and had a higher expectation of life because of the improved and more regular food supply. Aryanization thereafter means primarily the progress of plough agriculture in fixed land holdings—with a new social organization to correspond. The only people that adopted this without the Aryan idiom are Dravidians, not Austro-Asiatics. So far as I know, neither the primitive Australians nor those aborigines whose languages (e.g. Munda, Khmer, etc.) serve as source-material for the Austro-Asiatic theory produced any striking innovation in food production. Whatever they know of serious agriculture, metal work, pottery and handicrafts (except weaving baskets and fishing-nets) seems to have been learned after the 'Aryan invasion', so that they still remain nearer to the food-gathering stage than any other people in the East.

The Udumbara tree (*Ficus glomerata*) is native to India. Its sanctity, use of its wood for royal consecration thrones, and its edible fruit indicate that it was a totem tree. In fact, there is a historical Udumbara tribe on whose coins[36] a tree normally appears, presumably the *udumbara*. There still exist low-caste Udumbaras in Gujarat and a few Udumbara Brahmins as well. The great Sanskrit poet and dramatist Bhavabhūti was such an Udumbara Brahmin.[37] This does not mean organization by the Brahmins of a 'vast confederation' but that Brahmins were adopted into the tribes, or joined the tribal priesthood. This process continued down to the last century[38] and is in fact the principal method whereby successive developing groups of *āṭavika* savages were enrolled as endogamous castes into general Indian society—the formal aspect of 'Aryanization', even in Dravidian regions.

5. *Sadakani*

The classification of ancient Indian peoples on a slender linguistic basis into Aryan and non-Aryan or pre-Aryan groups often excludes the possibility of consistent statements about customs, manner of life, or ethnic affinities. The Brahui 'island' in the north is explained on the basis of a pre-historic Dravidian population all over the country. Actually, there is no reason to treat it as other than a casual survival of unabsorbed trading settlers from the south in historic times. Tolstov's excavations at Khorezm show unmistakable south Indian types in stucco relief depicting soldiers on garrison duty for the earlier Kuṣāṇas in Central Asia; the find is supported by anthropometry of the skulls dug up at the site. Alberūnī[39] refers to Kanarese soldiers in the armies of Mahmud of Ghazni. Adventurers from the Dravidian section of the Peninsula had set up considerable factions at various courts, by the eleventh century, even in Bengal.[40] Unless the existence of Brahui can be proved, say in the third millennium BC in about the same place as today, the linguistic explanation lacks force. The thesis becomes still less convincing when the Burushaski 'island' on the Karakorum is taken into account. The assumption that the non-Aryan and non-Dravidian languages of India, all primitive tribal idioms, can be grouped together as having a common or similar 'structure', whatever that term may mean, is doubtful.

Przyluski (*JRAS*, 1929, pp. 273–9) derived Prakrit *sātakaṇi* from *kon* 'son' (Munda) and *sadom* 'horse' (Santali, Mundari, etc.), as 'son of the horse'. He notes the horse emblem on certain Sātavāhana coins, then the Viṣṇuite-Śaiva conflict and the flowering of Prakrit under a Śātakarni Hāla. The conclusion is: 'Quand on voudra mesurer la part des influences anaryennes dans le développement de la littérature prakrite, on ne devra pas perdre de vue que l'onomastique des Andhras contient un important élément austro-asiatique'.

This slipping off into a groove spoils an otherwise valuable study. There is no question that the Sātavāhanas rose from low tribal origins.[41] Their region, as has been explained, had no agriculture to speak of before the sixth century BC, hence could not have supported anything beyond small tribes with petty chieftains; certainly not an 'Aryan' king. The horse introduced by Spaniards in America ran wild, bred in large numbers, and was then used by Amerinds of the prairies, who thereby became more efficient in killing the bison. The Aryan horse would similarly have reached some aborigines in the Deccan, or been acquired from northern caravan merchants by way of trade. The tribe or family groups who first used horses would gain superiority in warfare and the hunt. *Sātakaṇi* would be equivalent with 'horse totem', which agrees with Przyluski's findings; but the Austro-Asiatics are superfluous, inasmuch as the totem is found with the horse all around the old world, from the White Horse of the Saxons to the clan name Ma among the Chinese.

The development into Śātakarṇi and Sātavāhana is of peculiar interest. The name is apparently a direct Sanskritization of *sātakaṇi* by late writers in possession of extensive and beautiful Prakrit literature, but ignorant of the actual dynasty whose tribal origins had vanished into dim antiquity. The *Kalki* (*anubhāgavata*) *Purāṇa*[42] reports a *Saptivāhana* king named Śaśidhvaja, who gave his daughter to Kalki. That Kalki was a minor historical character later promoted to a messianic future *avatāra* is clear from all extant narratives; he was the son of a Brahmin and a woman of the low Mātaṅga caste (our *ibhyas* again) and his symbol is the white stallion. *Sapti* is good Vedic Sanskrit for horse, with special reference to the sacred horses of the Sungod's chariot. Both *sapti* and *saptan* 'seven' could be prakritized as *sāta*; the natural confusion may account for the seven horses of Sūrya, who is called *sapta-sapti* and so depicted in many icons. The *vāhana* 'vehicle' of an Indian deity is generally shown as his mount, but is obviously a totemic manifestation of the god or goddess. Thus Brahmā *is* the swan. Clear evidence of pre-historic and pre-Śiva worship of the humped bull[43] has been uncovered by archaeologists. The large animal which normally occupies the greater part of an Indus seal is presumably a clan emblem, just as the Athenian Boutadai had their shields marked with a bull's head. There is a direct line of descent from the pre-historic ice-age artist's pebble 'sketch-sheet' and the stamp seals and cylinder seals used to protect merchandise from Mesopotamia to the Indus.

Saptikarṇa 'horse-ear' sounds like a 'split totem' which sometimes develops when a primitive exogamous clan splits into two or more units. The clan name *Ghoṭaka-mukha* 'horse-face' occurs in the *gotra* lists and the *Kāmasūtra*,[44] while Ghoṭamukha is reported in *Arth.* 5.6 as a former master of political science. Earlier, the legend of *Śunaḥ-śepa* and his brothers, each of whose names means 'dog's tail' and famous *gotra* names like Śaunaka (from *śvan* 'dog' *śunaka* 'puppy') carry one in the same direction. There is actually a Sanskrit word for 'split clan', namely *gotrāvayava* (Pāṇ. 4.1.79). In Pāṇ. 4.1.173 the Udumbaras and others are (according to commentators) *avayava* components of the Śālvas; this is treated as a confederacy by Przyluski, but the two possibilities are not mutually exclusive. The etymology of *gotra* 'cowpen' and the comment on Pāṇ. 4.3.127 implies that at some stage, the local *gotra* group had a distinguishing mark for its men and brand for cattle—presumably owned in common.

Śālva is given as tree with edible fruit by some commentators on Pāṇ. 4.3.166; a large number of Brahmin *gotra* names[45] are edible tree- or animal-totems as among so many savages and for that matter among Latin gentes. We shall consider here only six examples of Sanskrit names ending in *karṇa*, none in the same category as *manda-karṇa* 'hard of hearing'. In the *gaṇa* Śivādi (Pāṇ. 4.1.112) are found (in the *Kāśikā* also) the clan names *tṛṇakarṇa* (var. *tūna-*), *mayūrakarṇa, masūrakarṇa, kharjūrakarṇa*; respectively 'grass-ear', 'peacock-ear', 'lentil-ear', 'date-ear'. These exclude the split totem; nor can they be used to describe shape or colour of a human ear. The analogy with *saptikarṇa* is clear, and one may point to a *śaunakarṇi* 'son of dog-ear' in the *gotra* lists. Still better known is *Jatūkarṇa* 'bat-ear'. In each of these cases, the termination—*karṇa* signifies 'descent from' rather than a split totem. Finally, the demon *Kumbhakarṇa* might have had ears like pot-handles (e.g. the Scottish 'lug'). But the *kumbha* is often the homologue of the uterus and symbolizes a mother-goddess. This would explain the otherwise stupid account of the hundred Kaurava sons and one daughter of Gāndhārī being born through the intermediacy of *ghṛta-kumbha* ghee-jars; that many of these sons were patron *yakṣa* cacodemons of northern towns[46] is known. Vasiṣtha and Agastya had similar origin, being born from womb-jars, and the *ācārya* Droṇa's name as well as birth-story throws him in the same category. *Drauṇi* and *Drauṇāyana* are again listed as *gotras*. Droṇa's son Aśvatthāman bore in his forehead (from his very birth) a precious jewel—the symbol of a *nāga*. So, the Sanskrit termination—*karṇa* can signify 'son of' as in Muṇḍāri, and may be associated with pre-Aryan elements. That a man has a good Aryan name does not mean that he had an Aryan father, nor even that he had a father at all.

6. *Parallel Development*

It might seem at this point that I merely replace Austro-Asiatic by *nāga* or some such change of name. The matter lies much deeper, being the gradual and progressive absorption of many distinct *āṭavika* tribes into general Indian society which had had its own course of food-producing development since 3000 BC. The influence of food-producing neighbours, infiltration by caravan merchants, Buddhist, Jain and other monks, Brahmin priests and an occasional adventurer of some military capacity would generally introduce food-production and a class structure. From that stage, the course of assimilation depended upon the relative wealth and armed strength of the environment. The important point is that there was always a reciprocal influence. It seems to me that forgotten tribes show their existence in the onomasticon of peasant deities, particularly the mother-goddesses; Śirkāi, Tukāī, Bolhāī, Meṅgāi, Soṅgzāī, Kumbhaljā (and of course the pre-Śākyan Lumbinī) seem to have no acceptable derivation. The folk etymologies are demonstrably eponymous, sometimes as crude as the world-derivations in the *Brāhmaṇas* and *Upaniṣads*. But there is nothing to show that any of these were Austro-Asiatic nor that they all belonged to one pre-Dravidian or pre-Aryan group. Brahmin tradition lumped all kinds of aborigines together under the generic title *nāga* (cobra or more rarely elephant), presumably as snake-worshippers. The *nāga* cobra becomes a garland for Śiva, bed and canopy for Viṣṇu, the patron demon for many Buddhist *vihāras* and a few cities. The mother-goddesses are, whenever the number and wealth of their worshippers warrants it, identified with Durgā, Lakṣmī, or the like, 'married' to the corresponding god and worshipped in suitably endowed temples. This Brahminization reflects the underlying change from food-gathering in independent tribal units to food-production in a society that preserved endogamy and a (hierarchical) commensal tabu as features of its caste system. This preservation is due primarily to the fact that food-gathering remained a powerful supplement to agriculture till the forests disappeared, while clothing and shelter are not physically indispensable over most of India. It should be noted that Indian monastic tradition also has deep roots in the food-gathering tradition.

The danger of treating 'Aryan' as a homogeneous unit over any considerable extent of time or space, or even in any large literary source formed over many centuries, may easily be demonstrated. The Madra tribe in the *Mahābhārata* was settled in the north-west, along with the allied Śālva, Udumbara, Bāhlīka and Gāndhāra. Both Pāṇini and Patañjali came from or near this territory. The more learned *Upaniṣadic* philosophers (*Bṛhad.* 3.3.7 and 3.7.1) claimed to have wandered among the Madras to study the *yajña* fire-ritual, the very core of the sacred Vedas. The local host is named as Patañcala Kāpya. *Jātaka* tradition supports this independently in placing Taxila as the main centre of (Vedic, Sanskrit and medical) education to which Gangetic princes and Brahmins travelled by the great northern trade route, the *uttarāpatha*. For that matter, the *Upaniṣads* (*Chand.* 5.3.5.11; *Bṛhad.* 2.1.6.2.) show Brahmins at Kāśī and Pañcāḷa learning high philosophy from Kṣatriyas; this perfectly genuine though un-Brahminical tradition was continued in history by great Magadhan Kṣatriya teachers like the Śākyan Buddha and the Licchavi Mahāvīra. Nevertheless, Karṇa as the ruler of Aṅga in the east exchanges biting discourtesies with king Śalya of Madra-land, though the latter has agreed to act as Karṇa's charioteer in the imminent desperate and hopeless contest. The reproaches against the Madras and their neighbours are that: Women mixed freely with men, without restraint or modesty. All drank and ate meat. The ladies would cast off their garments to dance when intoxicated. . . . Still more shocking was slackness in observance of caste distinctions (8.30). 'There a Bāhlīka who has been a Brahmin becomes a Kṣatriya, a Vaiśya or Śūdra, or even a barber. From a barber he again becomes a Brahmin. Having been a twice-born (*dvija*), he there becomes a *dāsa* again . . . In the same family one (male) may be a Brahmin while the rest are common workmen'.

It does not seem to have struck the Brahmin redactors of the *Mbh.*, nor for that matter Śalya himself, that this kind of abuse sat ill in the mouth of Karṇa. Though ranked as a pre-eminent Kṣatriya, Karṇa had no legal father, had been exposed by his unwed mother to hide her shame, rescued and brought up as his own son by a lowly professional chariot-driver. The censure only proves that the Madras and their allies retained the older Aryan custom whereby no man was degraded by his profession, while ritual had to be performed by some member of the family or clan. (Parenthetically, this last rule alone can explain the presence of so many tribal names in the Brahmin *gotra* list, whether the Brahmins were originally strangers adopted into the tribe or members of the tribe who specialized in pontifical functions). The quotation agrees very well with *sutta* 140 of the *Majjhima-nikāya*. The Pāli discourse reminds the Brahmin Assalāyana through the mouth of the Buddha that in Yona, Kamboja, and other regions beyond the (north-west) frontier, there were only two castes: Ārya (= free) and *dāsa* (= slave); moreover, a person who had been an Ārya could become a *dāsa* and conversely. That is, the Madra-Bāhlīka-Gāndhāra-Kamboja lands had developed a form of chattel slavery nearer to the classical Graeco-Roman model than to the complex and rigid caste system evolved in the Gangetic Plain. As explained, the latter was better suited for the peaceful absorption of savage tribes in the warmer and wetter parts of India, under the conditions that prevailed before mechanized production became the norm. This cumulative difference had become significant by the end of the fourth century BC. Earlier in the great epic, a Madra princess famous for her beauty had literally been purchased by Bhīṣma as legal wife for his nephew Pāṇḍu, with no more ado than over a basket of vegetables: *Pāṇḍor arthe parikrītā dhanena mahatā tadā* (*Mbh.* 1.105.5). This passage proved so embarrassing to later Brahmin orthodoxy that several versions of the *Mbh.* insert discordant interpolations to explain it away. The *smṛtis* forbid bride-price for the upper castes (*Ms.* 3.51–3) as amounting to the sale of a daughter; therefore, in the high *ārṣa* form of marriage, the gift even of a pair or two of cattle to the bride's father was forbidden (*Ms.* 3.53). Nowhere is the wedding of Mādrī declared Asura as it would be by *Ms.* 3.31; it might be added that the custom is permissible and normal in some 80 per cent or more of the Maharastrian population; Brahmins do not hesitate to officiate (for a consideration) at such weddings.

The change from *Ṛgvedic* to *Yajurvedic* Aryans corresponds rather well to that between the ruder Germani of Tacitus and Caesar's Gauls of the later La Tène iron age culture. This is another example of parallel development, not a suggestion that the Druids were really Brahmins or that Caesar must be later than Tacitus! When we look for totemic origins in the *gotra* lists, there is no implication that the Brahmins concerned were comparable to medicine men of Austro-Asiatic savages. Nevertheless, Brahmin penetration of the priesthoods of comparatively savage groups is demonstrable or deducible from the earliest 'Aryan' period down to the last century. The *Manusmṛti* interdict at a feast for the manes upon any Brahmin who sacrificed for tribal organizations *gaṇānām caiva yājakaḥ* (*Ms.* 3.164) would otherwise have been quite superfluous. How explain the Śaigrava *gotra* (attested by a Mathurā inscription[47] though absent from surviving *gotra* lists) among Brahmins except by association with the Śigru tribe of the *Ṛgvedic* (*RV.* 7.18) Ten Kings' War? Is not the tabu upon the *śigru* ('*Moringa pterygosperma*') as food for ascetics (*Ms.* 6.14) of such tribal-totemic origin? The iguana is specially excepted (*Ms.* 5.18) from the tabu on the flesh of five-nailed creatures, but eaten today only by the lowest castes; what of *godhāśana* 'iguana eater' as a gens in the *gaṇa* Kāśyādi (on Pāṇ. 4.2.116)? The hungry Brahmin wanderer Baka Dālbhya (or Glāva Maitreya) spies in *Chāndogya Up.* 1.12 upon an assembly of dogs, led by a white dog (*śvā śvetaḥ*) as they dance hand in hand to perform an *udgītha* chant for food. This can only mean a fertility rite of a dog-totem clan; I have witnessed similar chants and dances among the lowest Indian tribal castes. A Kukuraka ('dog') tribe is listed among the formidable military tribes in *Arth.* 11 [the reference is to Kukura, which occurs in *Arthaśāst*ra, 11.1, pp. 160–1—Ed.]; a cut above the *āṭavikas* but dangerous to royal power. The historical name Kokerah for the region about Ranchi in Bihar may be due to the Kukurakas. We have already noted the Brahmin *śaunaka* gens.

In the same way, modern linguists talk of a Koḷ language or group of languages. A Koḷiya tribe is clearly referred to in the *Jātakas* as having the Koḷ tree *Zizyphus jujuba* as a totem; the Sanskrit name *badara* for the same jujube tree leads to Bādarāyaṇa, whom no one relates to the Koḷiyans. In Marathi, Koḷī (like *nāga* further north) means the originally heterogeneous marginal tribe-castes that took late in history to agriculture and were often pressganged for porterage in army service. The same word also means spider and fisherman, presumably because the fisherman makes and uses a net to catch his prey as a spider his web. Here the derivation is not totemic but occupational; heavy deposits of microliths at certain favoured spots on the river bank surely indicate prehistoric fishing camps in Mahārāṣṭra. Men of the Koḷī caste still catch fish and keep up age-old cults at some of these places, as at Cās-Kamān. The Śākyans seem closely related to the śāka tree (*Shorea robusta*) and there existed two sub-groups among them known as reed-śākyas and grass-śākyas, the last being reminiscent of *tṛṇakarṇa*. Pippalāda as a *gotra* has a modern non-Brahmin counterpart among the Pimpḷés (now a surname, once a clan) who, at their village Pimpḷoḷī, still observe characteristic tabus such as not eating off plates made of *pimpal* (*Fiscus religiosa*) leaves. This should place the Udumbaras in proper perspective.

There still exist tiny remnants of a *gavaḷī* tribal caste, who live solely by pasturing cattle. To most city-dwellers *gavaḷī* means only 'milk-man' whatever his caste. Remote villages report strong traditions which show that the now extinct *gavaḷīs* were relatively more numerous at one time and relatively more important in the rural economy. This sounds like an Aryan invasion, but I have been unable to find any indication of their possessing horse-chariots, the heady *soma* drink, the over-developed fire ritual or the powerful aggressive tendencies of Vedic Aryans. Archaeologically, their successive waves appear in the western Deccan to be responsible for megaliths, rock engravings of a peculiar type, upland terraces not meant for the plough, and certain remarkable mortarless structures (*vāḍage*) of undressed stone that are traditionally cattle enclosures though never used now as such. The terraces and *vāḍage* are sometimes ascribed to the mythical Age of Truth (*satya yuga*) by older peasants.

Occasionally, the pastoral cults survive in the name of a comparatively rare patron god of cattle: *gavaḷūji-bābā*. Still rarer is the use of the term to describe a village. One such is Gavaḷyācī Uṇḍavaḍī not far from Baramati, with a companion village Corācī Uṇḍavaḍī. The village Corācī Āḷandī has a tradition that the qualification 'thief's' was originally genitive plural: *corāmcī* 'of the brigands'. The origin of this latter village can be traced back to long before the eighth century AD. The added *cora* both at Āḷandī and Uṇḍavaḍī merely denotes a settlement of tribal origin which long retained habits of brigandage, taking to plough culture much later than neighbouring villages. This would be impossible to restore without field work, merely from the etymology of *gavaḷī* and *cora*; in the latter case, distant villagers invent some repentant thief who originally settled the village of Āḷandī. The primitive goddess Bolhāī is reported by her senior worshippers, the Vājī ('horse') clan at Pāsaṇe, to have been taken by *coras* to her present location, which represents tribal cult migration quite accurately.

A modern observer could report (*New Yorker*, April 18, 1959, p. 119) that in the neighbourhood of Pawa in north-eastern Congo: 'The pygmy women used a kind of sing-song in their speech . . . and there were experts who believed that this was the vestige of an ancient pygmy language; nowadays the pygmies had no identifiable language of their own, merely speaking that of whatever settled tribe they lived near . . . They had a natural balance of trade—the sort of mutual dependency that naturalists call symbiosis. The pygmies killed game and gave some of it to the villagers, whose normal diet lacked proteins, and in return got the products of agriculture—mainly bananas—which, as nomads they did not grow themselves. Nowadays . . . the pygmies are accustomed to a steady supply of bananas and this keeps them from disappearing into the forest for very long. The men may hunt for days on end, but meanwhile the women will go back to the villages to fetch bananas and this ties them all down to some degree.' No better illustration could be found of the development of primitive languages in relation to food gathering and food production. Now add the following important remarks by T. Burrow (*Trans.* 19, *Bull. Ramakrishna Mission Inst. of Culture*, Feb. 1958): 'The number of loan-words in Sanskrit, which cannot be explained as either Dravidian or Munda, will remain considerable. It may very well turn out that the number of such words which cannot be so explained will outnumber those which can be. This is the impression one gets, for instance, from the field of plant-names, since so far only a minority of this section of the non-Aryan words has been explained from these two linguistic families.

If we take, for instance, the name of the jujube (*Zizyphus jujuba*), we find four synonyms, all obviously non-Aryan words, namely *kuvala* or *kola, karkandhu; badara* and *ghoṇṭā*; and none of these has been explained out of either Dravidian or Munda. Evidence such as this leads to the conclusion that there must have been several non-Aryan languages or families of languages which exercised an influence on the vocabulary of Indo-Aryan'. Inasmuch as the total number of words in use has grown with social production, it may be better to concentrate upon parallel development rather than invent fictitious origins.

Language is surely a means of exchanging ideas, which cannot precede the exchange of surplus. This implies that any language common to more than a handful of people must have been preceded by commodity production and exchange on a corresponding scale. But it is known that, in the most primitive societies, such exchange is not simple public barter with a basic standard of equivalents modified by haggling or by the laws of supply and demand. On the contrary, the exchange appears at its most primitive level in the form of gifts that cannot be refused and must ultimately though not immediately be compensated by a reciprocal gift from the recipient. Moreover, these gifts are only to be made between fixed persons[48] of different tribes in a special relationship, 'trade friends'. Within the tribe, such gifts are obligatory, dependent upon the status of the giver, with no idea of compensation—a form of distribution of the surplus. It seems plausible that at a still earlier period, the tribe was fused out of individual totems on the same basis, with exchange of human beings in some form of exogamous 'marriage' as a concomitant of the transfer of food (often the special totem product) or techniques. If so, the development of language cannot be separated from the succession of pre-historical stages through which a given society has passed.

The position stated does not approach the formalism of Marr's Japhetic Theory which derived all Caucasian languages and perhaps all languages from the four mystic syllables *yon*, *ber*, *sal* and *ros*. It differs also from the Durkheim-Levy-Bruhl[49] type of sociology which takes 'pre-logical' mentality as a fixed characteristic of certain ethnic groups, not as the concomitant of the various stages of development through which the particular group reached its actual level of social production. One may leave out of discussion the higher mentality which takes slums, world wars, massive colonial suppression and nuclear bombs as logical assets of civilization; but two questions remain. First, did not the superior 'logical' people once pass through the same 'pre-logical' stage, say when their ancestors could make only the simplest tools of stone?

Second, what caused the change from the pre-logical to the logical mentality? One possible answer has been suggested in this note.

NOTES

1. The reader is referred to two works of mine, entitled: (a) *An Introduction to the Study of Indian History* (Bombay, 1956) and (b) *Myth and Reality: Studies in the Formation of Indian Culture* (Bombay, 1962), where further references will be found. Facts about Maharastrian villages or customs from my own observations in the field are not documented.
2. L. de la Vallée Poussin, *Dynasties et Histoire de l'Inde depuis Kanishka jusqu'aux Invasions Musulmanes* (Paris, 1935), avant-propos, p. xix, footnote. Special attention is called to pp. 360–1 of this book, for important additional remarks on the process of Brahmanisation.
3. The *Kṛtyakalpataru* of Bhaṭṭa Lakṣmīdhara (a minister of king Govindacandra Gāhaḍavāla of Kanauj); Gaekwar Oriental Series CXIX for vol. 12 of the work, being the *vyavahāra-kāṇḍa*. No special *praetor peregrinus* existed, and no *ius gentium* seems ever to have been officially recorded or codified, though its existence in practice is clear.
4. P.V. Kane, *A History of Dharmaśāstra* (*Ancient and Mediaeval Religious and Civil Law*), 5 volumes (still incomplete) (Poona, 1930–62). Though the vast majority of India's people are śūdras in this classification, there is no way to determine just what śūdras were actually meant by the few authors who wrote on śūdra rites and legal usage.
5. E. Hultzsch, *Corpus Inscriptionum Indicarum* I (The inscriptions of Aśoka) (Oxford, 1925) gives the complete Aśokan texts known to that date, and a linguistic analysis.
6. *The Cambridge History of India*, vol. I, *Ancient India*, ed. E.J. Rapson (Cambridge, 1922), p. 187.
7. First published in full in *Serie Orientale Roma* (ISMEO) XXI, 1958: 'Un editto bilinguale Greco-Aramaico di Aśoka'. The treatment in *JA*, 1958, pp. 1–48 seems preferable.
8. Commenting on the *vārtikā: sarve deśāntare*: p. 65 of Patañjali's *Vyākaraṇa Mahābhāṣya* with Kaiyaṭa's *Pradīpa* and Nāgeśa's *Uddyota*, vol. I, Nirṇayasāgar Press (Bombay, 1938).
9. The original remark may have been by Megasthenes, and is seen in its most forceful version in Arrian's 'No Indian is ever known to lie'.
10. R.A. Fisher, *Statistical Methods For Research Workers*; 10th ed. (Edinburgh, 1948).
11. A.A. Führer, *Buddha Śākyamuni's Birthplace in the Nepalese Tarai* (Allahabad, 1897).
12. *A Record of the Buddhist Countries* by Fa-hsien (Peking 1957). The translation in S. Beal's collection: *Ta-Tang-Si-Yu-Ki: Buddhist Records of the Western World*; 2 vols (London, 1884), also contains this in the introductory portion.

13. The discrepancy seems to have been first considered in archaeological detail by Vincent Smith in the prefatory note (p. 10) to P.C. Mukerji's '*A report on a tour of exploration of the Antiquities in the Tarai, Nepal, the region of Kapilavastu during February and March 1899*' (Arch. Surv. Ind. No. XXVI, pt. i, Imperial Series; Calcutta 1901). Smith was capable of identifying Satna railway station in central India with the site of ancient Kauśāmbi (*JRAS*, 1898, p. 511), but his discussion of the Kapilavastu problem seems reasonable. The strictures on pp. 3–4 of the same preface about Führer's supposed excavations are by no means excessive.
14. K. F. Geldner, *Der Rig-Veda aus dem Sanskrit ins Deutsche übersetzt und mit einem laufenden Kommentar versehen* [Cambridge, Mass. (Harvard Oriental Series, vols 33–5) 1951]. For the Sanskrit text and Sāyaṇa's commentary, I have used the 4-volume edition of the *Ṛgveda-Saṃhitā* issued by the Vaidik Samshodhan Mandal (Poona, 1933–46).

    There may have been a sort of feudalism at a stage not much later than the *Ṛgveda*, among the Hittites: E. Neufeld; *The Hittite Laws translated into English and Hebrew with commentary* (London, 1951), particularly laws 39–41; 46–56 for military service as condition of land tenure. But there is no evidence for comparable fixed land settlement in the *Ṛgveda*, nor for a king ruling over many different tribes by the military strength of a few of his own tribal comrades, as with the Hittites.
15. J. Bloch, *Les Inscriptions d'Aśoka* (Paris, 1950), p. 104.
16. The Pāli Text Society's *Pali-English Dictionary* (London, 1921).
17. The Pāli Text Society's edition of the *Dīghanikāya*, vol. I (London, 1890), p. 90; Buddhaghoṣa comments: *ibbhā ti gahapatikā* (peasants), on p. 234 of the *Sumaṅgala Vilāsinī*, vol. I (London, PTS 1886).
18. The Nirṇayasāgar editions of the *Upaniṣads* have been used for the text. With the commentary of Gopālānanda-svāmī, NSP 1932. For the English translation, R.H. Hume, *The Thirteen Principal Upanishads translated from the Sanskrit* (Oxford, 1934).
19. J. J. Meyer, *Das altindische Buch vom welt- und Staatsleben; Das Arthaśāstra des Kauṭilya* (Leipzig, 1926); the text used has been the revised southern edition *Kauṭilyārthaśāstram* (Mysore, 1960).
20. A. Berriedale Keith, *A History of Sanskrit Literature* (Oxford 1928), p. 461. The discussion in my history book (note 1) and in *JAOS*, 78, pp. 169–73 may be referred to for the authenticity of the *Arthaśāstra*.
21. J. F. Fleet, *Inscriptions of the early Gupta Kings and their successors; Corpus Inscriptionum Indicarum III* (Calcutta, 1888). The Hariṣeṇa *praśasti* of Samudragupta (posthumous) is on pp. 6–17.
22. Ibid., p. 41 of the introduction. As the founder of the Maitraka line was Bhaṭārka, a *senāpati*, the interpretation of *mahāsāmanta* as 'duke' would have been justified only if the Valabhī kings made any reference to some Gupta emperor as suzerain.
23. Ibid., inscription No. 33, pp. 146–8. Line 5 of the inscription has *sāmantair yasya bāhu-draviṇa-hṛta-madaih pādayor ānamadbhis*, but these *sāmantas* are explicitly mentioned as coming from territories over most of which Yaśodharman had

set up no administration and could claim no permanent sovereignty, namely from the Himalaya to the oceans. The reference can only be to kings defeated in some passing raid or invasion, and this is strengthened by special mention in the preceding line of Huns (Mihiragula) and other kings, whom even the Guptas could not vanquish but who were beaten by Yaśodharman.

24. D.D. Kosami, 'Indian Feudal Trade Charters', *JESHO* 2, 1959, pp. 281–93.
25. *Daśa-kumāra-caritam of Daṇḍin*, 14th ed. by N.K. Godbole, Nirnayasagar Press (Bombay 1940), p. 184; but the remarkably silly comment *sāmantaḥ syād adhīśvaraḥ* made by lifting half a phrase out of the *Amarakośa* confuses the issue. The context here, as in chapter 8 (p. 267 ff.) does not leave the meaning in doubt. Keith (*Hist. Skt. Lit.*, p. 297) suggests a date slightly before Harṣavardhana for Daṇḍin, so towards the end of the sixth or beginning of the seventh century AD.
26. *Epigraphia Indica* 4, pp. 208–11, where *mahāsāmantas* are named for the execution of the Banskhera plates of Harṣa. See also p. 130 of Bāṇa's *Harṣacaritam* (7th ed. NSP Bombay, 1946), where only 'baron' will suit; on pp. 100, 150 & c., *mahāsāmantas* of the court are named again.
27. Keith (*Hist. Skt. Lit.*, p. 413) vaguely places him about AD 700, but without committing himself.
28. *The Epigrams attributed to Bhartṛhari* (Singhi Jain Series No. 23, Bombay, 1948) is the critical edition where the stanza may be seen as No. 169.
29. Ibid., stanza 63. In the 12th Nirnayasagar edition of the *Abhijñānaśākuntalam* (Bombay, 1948, ed. N.R. Acarya), act 5, stanza 12; in Pischel's Harvard Or. Ser. edition, 5.13.
30. Wilhelm Rau, *Staat und Gesellschaft im alten Indien* (Wiesbaden, 1957), particularly pp. 51–4.
31. Suniti Kumar Chatterji in The Bharatiya Itihasa Samiti's *History and Culture of the Indian People*, vol. I: *The Vedic Age*, chapter VIII, for the statement of the Austro-Asiatic hypothesis. On page 153: 'We may admit the possibility of Sumerian and Austric being related, for we have to remember that the Proto-Australoids, who are supposed to have been the original speakers of Austric, were a very ancient offshoot of the Mediterranean race, and as such in their trek to India where they became specially characterized they may have left some of their tribes on the way, or some of their kinsmen might earlier have preceded them and had established themselves in Mesopotamia, to become the Sumerians who built up the basic culture of that part of the world. But even then it seems that India was the centre from which the Austric speech spread into the islands of the east and the Pacific; and the theory that there is actually an Austric Family of Languages in its two groups of Austronesian and Austro-Asiatic, as propounded by Pater W. Schmidt, may be said to hold the ground still.' I can't even understand this, let alone admit it.
32. V. Gordon Childe, *The Aryans* (London, 1926). The work needs revision, but the basic idea seems uncontradicted by new finds.
33. A.L. Oppenheim, 'The Seafaring Merchants of Ur', *JAOS* 74, 1954, pp. 6–17, a review analysis of vol. V of the texts from L. Wolley's excavations at Ur, by H.H. Figulla and W.J. Martin: *Letters and Documents of the Old-Babylonian period* (London 1953). The break (due to an Aryan invasion) came about 1750 BC if

Meluhha be the Indus valley: though so competent a scholar as S. N. Kramer would take Tilmun as Harappa, it seems clear that the usual identification with Bahrein must stand (*JAOS*. 74. 1954, p. 179). W. Wüst, curiously enough, also placed the Aryan invasion of the Indus region as at about 1750 BC (*WZKM* 34. 1927, p. 190), but this is simply a guess from poor archaeological material, without a scientific method for estimating the time from linguistic sources alone.

34. The two-wave theory was confirmed by personal discussion with Prof. S.P. Tolstov, in 1955. The mention of Iṣṭaśva (= Viśtāspa?), Iṣṭara-śmi, and Suśravas (Husravah) in the *RV.* seemed to me philological evidence for the second wave; the archaeological basis in India may be the two layers of the Harappan cemetery *H*. Prof. Tolstov also showed Indian type of faces in Kushan frescos (Note 39 below), and in a skull reconstruction.
35. The data will be found in *New Scientist* No. 251, Sept. 7, 1961; p. 566.
36. For Udumbara coins, J. Allan's *Catalogue of Coins in the British Museum, Ancient India* (London, 1936), pp. 122–3. The legend is Odumbara and the region of the Beas valley of the Punjab.
37. The *sūtradhāra* in the prologue to the drama *Mālatīmādhava* says that the poet belonged to a group of Brahmins settled at Padmapuram in the south (*dakṣiṇāpathe*): *Taittirīyāḥ Kāśyapāḥ; Udumbara-nāmānaḥ.*
38. The most recent example known to me is of the Tigaḷas, whose tribal fertility rite was given respectable ancestry by a Brahmin during the second half of the last century, and is now the most impressive popular festival at Bangalore.
39. E. Sachau (trans.), *Albiruni's India*, 2 vol. (London, 1910); vol. 1, p. 173. For dark-skinned guardsmen at Toprak-kala (Tolstov's excavations) in the third century AD, see A. Mongait, *Archaeology in the USSR* (Moscow, 1959), p. 272. The wide extent of the Kushan empire not only made it possible to bring in soldiers from great distance, but even attracted mercenaries from beyond the imperial frontiers.
40. The Senas who superseded the Pālas in Bengal were apparently of southern origin; Gāṅgeyadeva of Tīrabhukti seems to have had Kanarese ancestors; some Pāla queens and princes are named in Kanarese style, and the final stanzas of the drama *Caṇḍa-kauśika* imply that the wiles of the Nandas were practised at the Gurjara-Pratihāra court by Kanarese nobles (cf. the introduction to the *Subhāṣitaratna-koṣa* of Vidyākara, HOS, vol. 41, Cambridge, Mass. 1957).
41. The low tribal origin of the Sātavāhanas is preserved in Jain tradition, e.g. Rājaśekhara-sūri's *Prabandhakośa* (ed. Jina Vijaya, Santiniketan 1935; Singhi Jain Series 6), story 15. The original Sātavāhana was born of a Brahmin widow ravished and impregnated by the *nāga* (cobra-demon) of a pool in the Godāvarī river; Paithan was then a hamlet, and the widow's two brothers lived there by some sort of food-gathering. Tāranātha (in A. Schiefner's translation) similarly reports a *nāga* father for the first Pāla king. With the *Mbh.* heroes, of course, we have the immaculate conception in the manner of Trobriand islanders, which means that the father was traditionally unknown, fatherhood then being of no importance; the *Mbh.* tradition must basically have been pre-patriarchal, hence pre-Aryan.

42. In the printed edition (without frontispiece, Bengali form of *devanāgarī* type) 8.1; the Saptivāhana is given as king of Bhallāṭanagara.
43. The latest such excavations known to me were by F.R. and Mrs B. Allchin at Piklihal; their final report has not yet come to hand. [The report was subsequently published as: F.R. Allchin, *Piklihal Excavations*, Andhra Pradesh Government Archeological Series, I, Hyderabad, 1960.]
44. Ghoṭakamukha is reported in *Kāmasūtra* 1.114 as the authority for the third section of that work. Hayagrīva and Hayavadana may be adjectives, and Haihaya may or may not be connected with the horse, in spite of the termination.
45. The best available gotra lists are in J. Brough; *The Early Brāhmaṇical System of Gotra and Pravara* (Cambridge, 1953); actual *gotras* found in Maharastra among the Deśastha Brahmins have been collected by V.T. Sete in his *Gotrāvali* (in Marathi; Yajnavalkya Asrama, Poona 1951).
46. Sylvain Lévi, 'Le catalogue géographique des yakṣas dans la Mahāmāyūrī'; *Journal Asiatique* 5. 1915 (i), pp. 19–138; line 23 of the Sanskrit text, *Duryodhanas ca Srughneṣu*; but the list is composite, probably from many different sources: 1.60-*siddhayātras tatha Srughne*. For Bharukaccha, Bharuka in 1.17, Asaṅga in 1.43; for Rājagṛha, Vajrapāṇi in 1.3, Bakula in 1.6., Kumbhīra in 1.101. Not that there need be only one *yakṣa* per city, but the principal guardian could be only one—here a different one for each particular tradition among the worshippers.
47. H. Lüders noted in reading the Mathura inscription (*Epīgraphia Indica* 9, pp. 247–8) that the Brahmin of the Segrava *gotra* there named was treasurer of the Śāka kṣatrapa king Ṣoḍāsa; the title *gamjavara*, of which this seems to be the earliest mention, is a loan word from the Persian *ganjwār*. Lüders further comments that the legendary preceptor of *ācārya Moggaliputta Tissa* was a Siggava.
48. See particularly, B. Malinowski, *Crime and Custom in Savage Society* (London, 1940), pp. 22–5; also, Margaret Mead: *Sex and Temperament in Three Primitive Societies* (Mentor Books, New York 1950): pp. 19–20 and 31 for the Arapesh.
49. L. Levy-Bruhl, *Les Fonctions Mentales dans les Sociétés Inférieures*, translated into English as: *How Natives Think* (New York, 1925).

2

Living Prehistory in India*

The basic task of the prehistorian is to learn as much as he can about the lives of the vanished people he chooses to study. Since by definition he works with evidence other than written records, he sometimes turns for illuminating parallels to living peoples who themselves have not written history. Perhaps nowhere in the world can such parallels be found more readily than in India. For one thing, even the written material from ancient India cannot be considered history. Scarcely a single historical figure who lived before the Muslim period (beginning in the twelfth century) can be dated with any degree of accuracy, and more general accounts show little concern for facts or common sense. What is perhaps more to the point, there exist in India today many tribal peoples whose customs go back to preliterate times. Representing some 30 million (about 6 per cent) of India's total population of 440 million, these peoples preserve many features—in fossilized form, as it were—of Indian prehistory.

How is it that peoples whose way of life has remained largely unchanged from prehistoric times have survived in India, which has had cities and civilization since early in the third millennium BC? The answer lies in the availability of food. In India today food shortages are all too well known, but they are a comparatively recent development; even now they are limited to village farmers working marginal lands and to the nation's impoverished city dwellers. In most of India nature is so kind that for thousands of years it has been possible for people to live with comparative ease simply by hunting and primitive food-gathering. This is still the case in areas where over-cultivation and excessive clearing of forest have not eliminated the land's natural cover. Not only are fish and game abundant but also a variety of other natural products are enough in themselves to provide a balanced diet. Fruits, nuts, berries, leafy vegetables, tubers such as the yam, mushrooms, honey—more than 100 such

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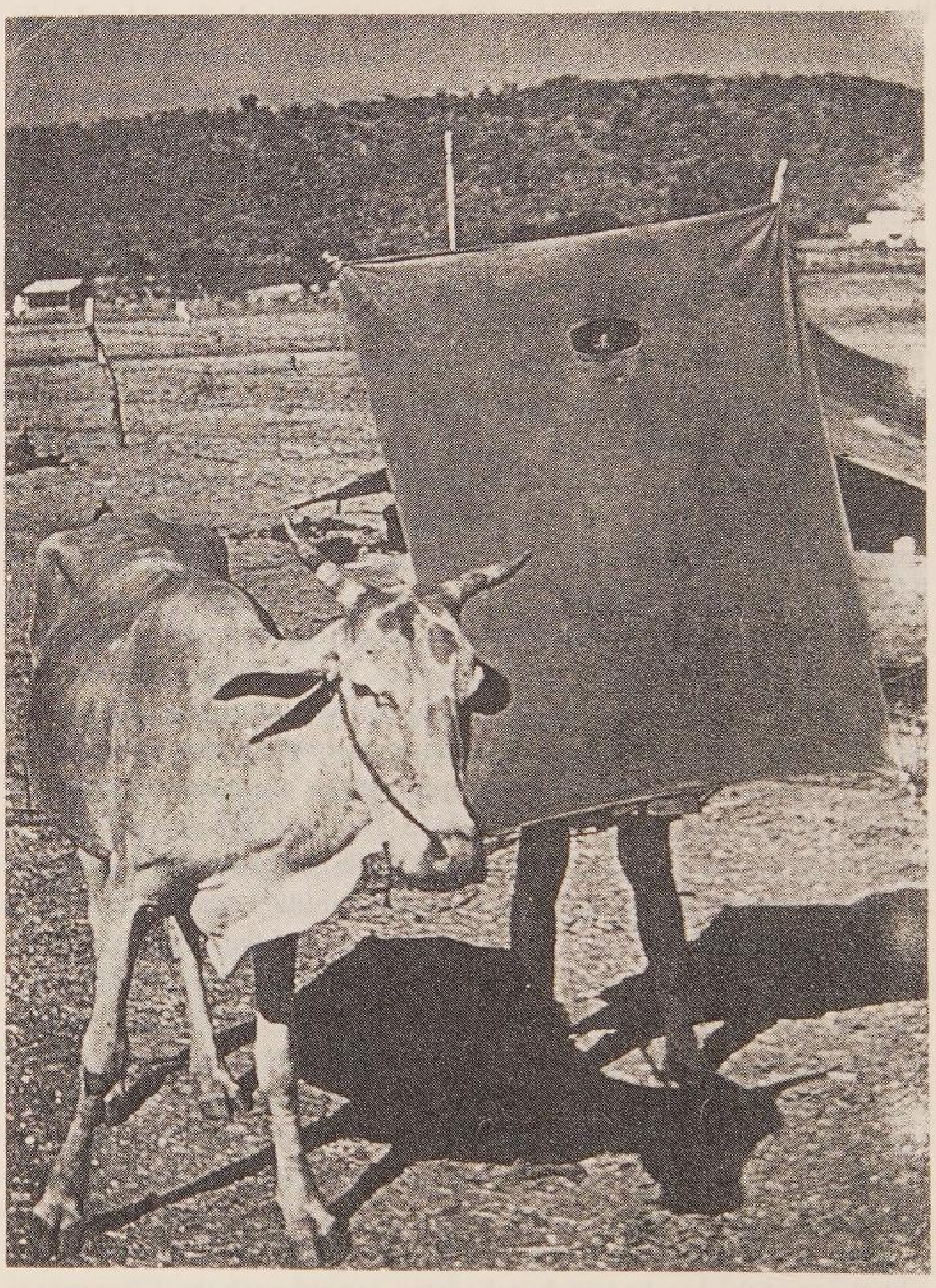
**Scientific American* (February 1967).

natural products can be gathered in season. A large number of foodstuffs that can be stored from one season to the next grow in both wild and cultivated forms. In this category are sesamum (which provides an edible oil), emmer wheat, rice, a wide variety of beans and the sorghums and millets. Indeed, in the days of Gautama Buddha (sixth and fifth centuries BC) the millet *Panicum frumentaccum* was gathered wild and not cultivated at all.

This abundance of vegetable resources, supplemented by the milk and other dairy products available to the herders of cattle, sheep and goats, means that even hunting is not really crucial to survival. One can support life reasonably well in the balmy Indian climate without killing anything. This is a basic reality that does more than merely account for the survival of primitive tribal groups in India today: it clarifies the origins of Indian social thought. The characteristically Indian religions—such as Buddhism and Jainism—regard the taking of life as a sin. It is scarcely conceivable that such an ethic could have developed if an economy of bloodless food-gathering had not provided prehistoric Indians with an adequate livelihood.

The Iron Age people who practised plough agriculture in India were at first limited to the plain of the Ganges. From that rich region they moved southward into the Deccan: the great forested plateau of peninsular India [*see illustration*]. This invasion was not accompanied by the violence that marked Rome's Iron Age conquest of tribal Gaul and pacification of the forests beyond the Rhine. As the advancing ploughmen from the north met the forest herders and food-gatherers of the south, the contact seems to have initiated a process of mutual acculturation. The food-gatherers learned to adjust to agriculture and the farmers not only came to rely heavily on food-gathering to supplement their diet but also brought wild foodstuffs under cultivation. This two-sided adjustment between gatherer and producer provides both the fabric and the pattern of India's past. It is notably reflected in today's social organization and accounts for the origin of caste and the caste system (see 'The "Untouchables" of India,' by M.N. Srinivas and André Béteille; *Scientific American*, December, 1965).

In many parts of India the names of the local tribal people are identical with those of the local agricultural castes, even though the difference in caste between tribesman and farmer prevents intermarriage and other forms of contact between them. The identity of names probably stems from an original unity, when immigrant farmers and indigenous food-gathering tribesmen at first made common cause in the forest region. The two major characteristics of the caste system—prohibitions against



Tribal Hunter from the central plateau of peninsular India stalks game such as quail by hiding behind a cloth screen and moving beside a grazing cow until the quarry is within reach. One of the Ras Phasé Pardhi tribesmen of Maharashtra, the hunter belongs to an aboriginal society whose ancient tradition of ordeal by fire may have inspired the more modern Hindu ritual of fire walking.

marriage outside the group and against acceptance of food from the hands of a stranger—are taboos that are typical of food-gathering tribal societies. One can imagine the caste system originating as a somewhat later effort of the indigenous food-gatherers to establish themselves as being superior to the immigrant ploughmen.

If this is the case, one may ask why the caste of farmers is now higher than that of tribesmen. Answers are not hard to find. First, whatever their initial handicaps, the farmers, simply by practising agriculture, had a sounder economic base than the tribal people, and in India, as elsewhere, social rank corresponds closely to position on the economic scale. Second, because of their somewhat better food supply the farmers must almost from the first have multiplied faster than the tribesmen and thus would soon have outnumbered and dominated them.

Although there are caste inequalities between farmers and tribal peoples today, plentiful evidence of mutual acculturation remains, particularly in the area of religion. Many of the supposedly 'Hindu' gods of the Brahmin pantheon, for example, have their actual origin in tribal cults. By the same token, when tribal people abandon their aboriginal ways and take to farming for a livelihood, they abandon their ancient gods and adopt Hindu religious practices. Much of the ritual that accompanies both the Hindu religion and the aboriginal ones seems bizarre to modern eyes. Nonetheless, to dismiss ritual as mere superstition (or worse, to follow the fad of explaining it in psychoanalytic terms) is to throw away a genuine opportunity to study both the history and the prehistory of India.

My own fieldwork has been confined to portions of the Deccan plateau and the adjacent west coast of peninsular India, an area in which my familiarity with local dialects and customs has made detailed investigations of tribal and village life possible. One of the first tribal groups I had a chance to study was the Ras Phasé Pardhi. These people, who now live in Maharashtra, originally came from Gujarat to the north and speak a dialect of Gujarati. The Pardhi are nomadic and are accompanied on their travels by a few scrawny cattle. The men do some casual labour and are skilled at stalking and snaring birds and other small game [*see illustration*]. The basic Pardhi occupations today, however, are begging and theft—practised by men and women alike. The Pardhi consider stealing a crime only if the victim is a fellow tribesman.

Pardhi religious ritual is a mixture of adopted and aboriginal elements. The principal object of worship is a silver plaque of modern manufacture that bears the image of a Hindu goddess. Nonetheless, the major

Packhorses belonging to shepherds of the Dhangar caste are led by the women to the next campsite in a round of travel that may cover as many as 400 miles during the eight months of the dry season. The Dhangar men do not follow the roads but let their sheep graze cross-country. Each night they pen the flock in the fields of local farmers, who pay for the manuring that results.

Modern Microlith is made by Dhangar shepherd, who smashes a nodule of chalcedony with a stone hammer and anvil. He will use one of the razor-sharp chalcedony fragments as a knife for castrating lambs. The knife is thrown away after one use.

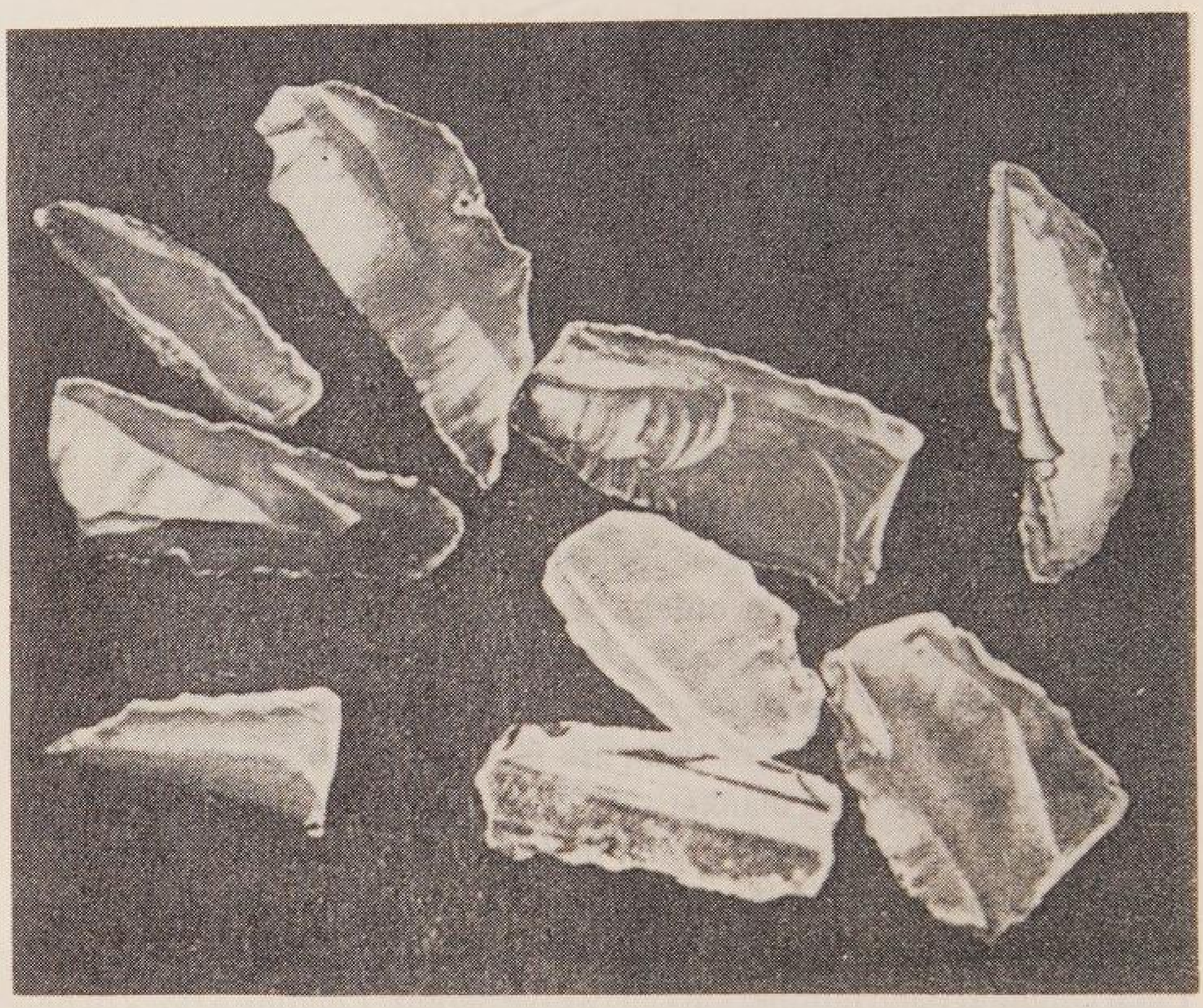
ritual—a fertility dance—gives every sign of being genuinely ancient. The performer is a male, the head of one of the small bands into which the tribe is divided. He dresses as a woman and is not merely a priest in the ritual. In his own words, 'I *am* the goddess.'

Part of the fertility ritual provides an interesting example of reciprocal acculturation between Hindu and aborigine. The dancer at one point plunges his hand into a pan of boiling oil, evidently without ill effect. This kind of ordeal is apparently an ancient Pardhi custom. At a Pardhi trial, for example, one proof of innocence is to walk a fixed number of steps while carrying a red-hot piece of iron. The parallel Hindu ordeal—walking on hot coals—has no sanction in Brahmin scripture; ordeals are not mentioned in the earliest Hindu sacred books. In fact, fire walking apparently did not become a part of Hindu ritual until about the beginning of the Christian era, when it was adopted primarily as a means of proving innocence in the face of strong evidence of guilt. One can scarcely avoid the conjecture that the Hindu ordeal was adopted from some aboriginal Indian rite such as the ones preserved today in the Pardhi dance in trial.

Another primitive group in the Deccan—the Dhangars—are a caste rather than a tribe. Some of them are farmers; others specialize in the manufacture of woolen blankets. At least one Dhangar family, the Holkars, took up the military life early in the eighteenth century and rose to princely status as the maharajas of Indore. Today the members of one Dhangar group follow tribal ways and earn a living as itinerant herdsmen. Each Dhangar band numbers about twelve people. Leading a flock of perhaps 300 sheep, the band spends the eight dry months of the year in a round of travel that rarely covers less than 200 miles and may range as far as 400 miles.

The women of the band travel the roads, moving from one pre-selected campsite to another and preparing the meals [*see illustration*]. The men herd the grazing sheep cross-country and leave them in some farmer's field at night. The sheep's overnight droppings are valuable fertilizer for which the farmer pays either in cash or in produce. These payments, together with small earnings from the sale of wool, a few skins and occasionally an animal provide the livelihood of these pastoral nomads.

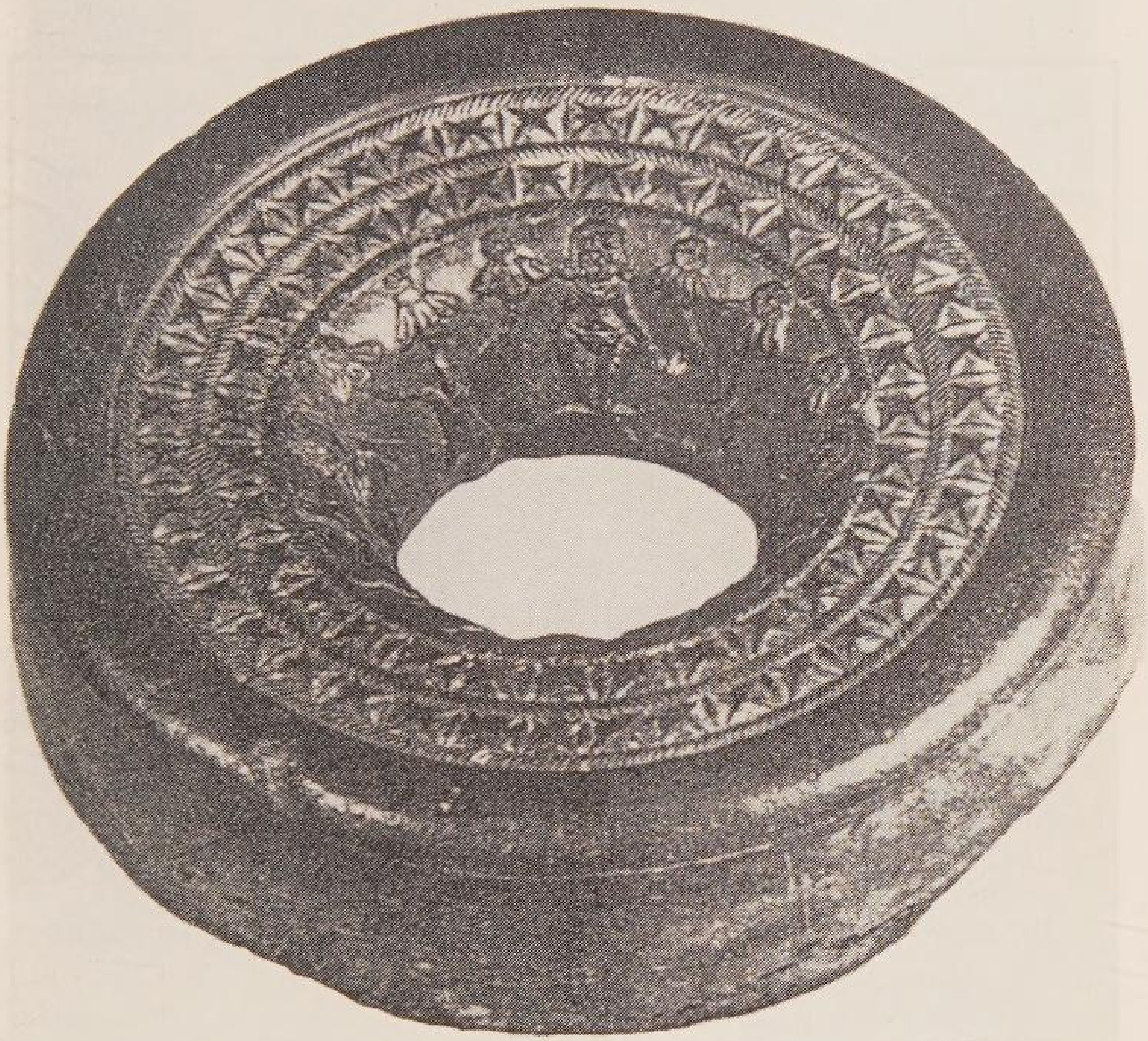
During the four months of the rainy season the Dhangar herdsmen move from their farmland pastures to traditional campsites on the plains that are dry enough to keep the sheep safe from the hoof rot they contract on muddy ground. At these rainy-season camps are sheep pens, solidly constructed of drystone masonry, that must have been built in prehistoric times. Some of the richest deposits of prehistoric stone tools I have found in India are close to Dhangar rainy-season camps. The same is true of many rock engravings that also appear to be prehistoric.



Ancient Microliths have been found by the author in surface deposits at many sites in peninsular India. Carefully produced flakes such as these provided aboriginal hunters and herdsmen with tools for working bone and wool and for cutting flesh and hides.

The stone tools are the tiny blades called microliths. It is a curious fact that although the Dhangars do not recognize the microliths as tools when they see them, they make and use similar tools themselves. When a lamb is to be castrated, a Dhangar shepherd takes a nodule of chalcedony and shatters it, using two other rocks as hammer and anvil [*see illustration*]. He then selects a sharp flake of chalcedony to use as a castration knife. After the stone flake is used it is ritually boiled together with the lamb's testicles and thrown away.

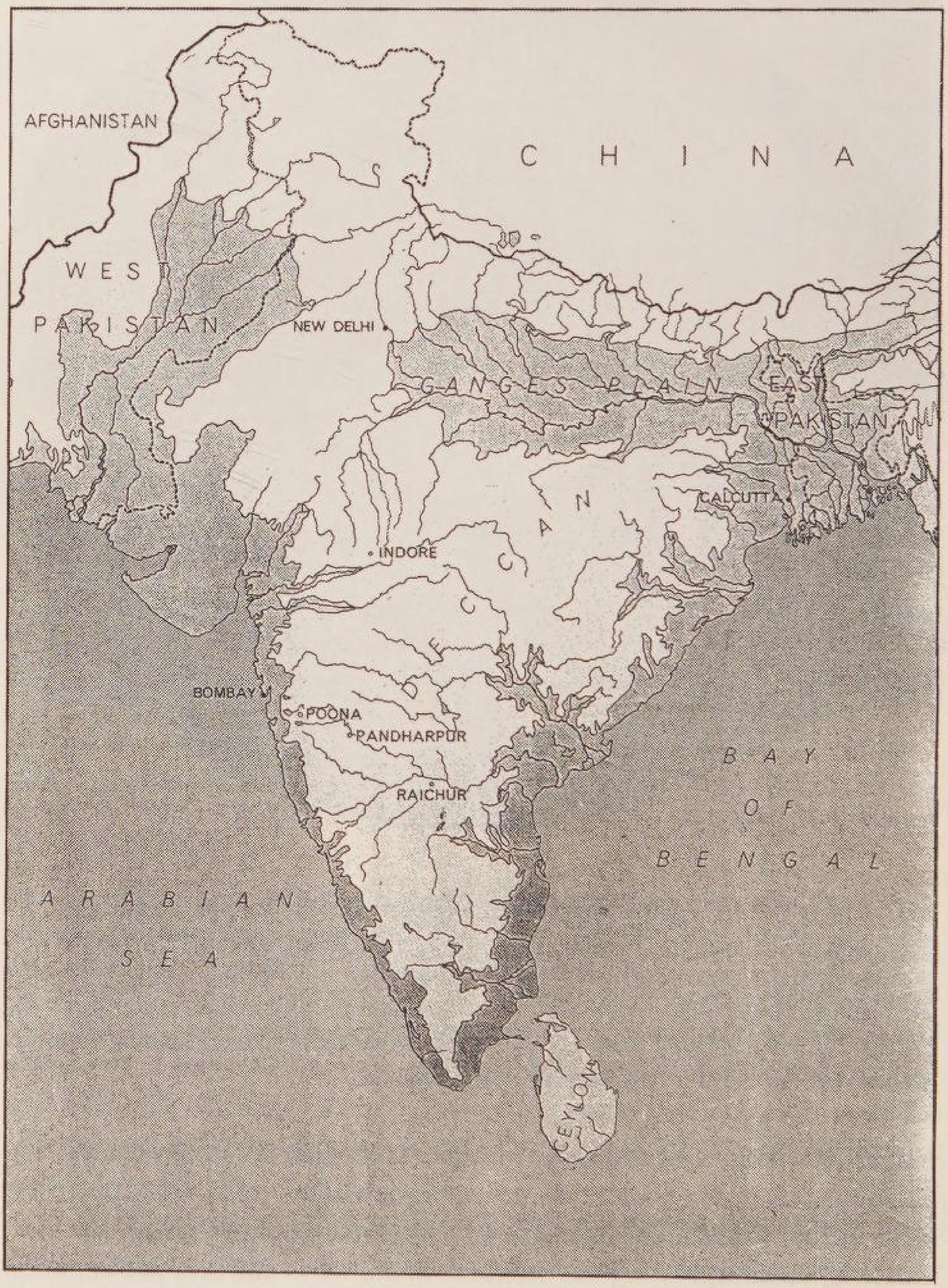
One of the traditional rituals in the Maharashtra region of the Deccan—the great pilgrimage to Pandharpur—may have originated in the days when everyone's life involved the kind of seasonal wandering that is still the way of the Dhangar shepherds. At the very least the pilgrimage is out of keeping with a settled agricultural way of life. The journey to Pandharpur can take as long as three or four months and traditionally



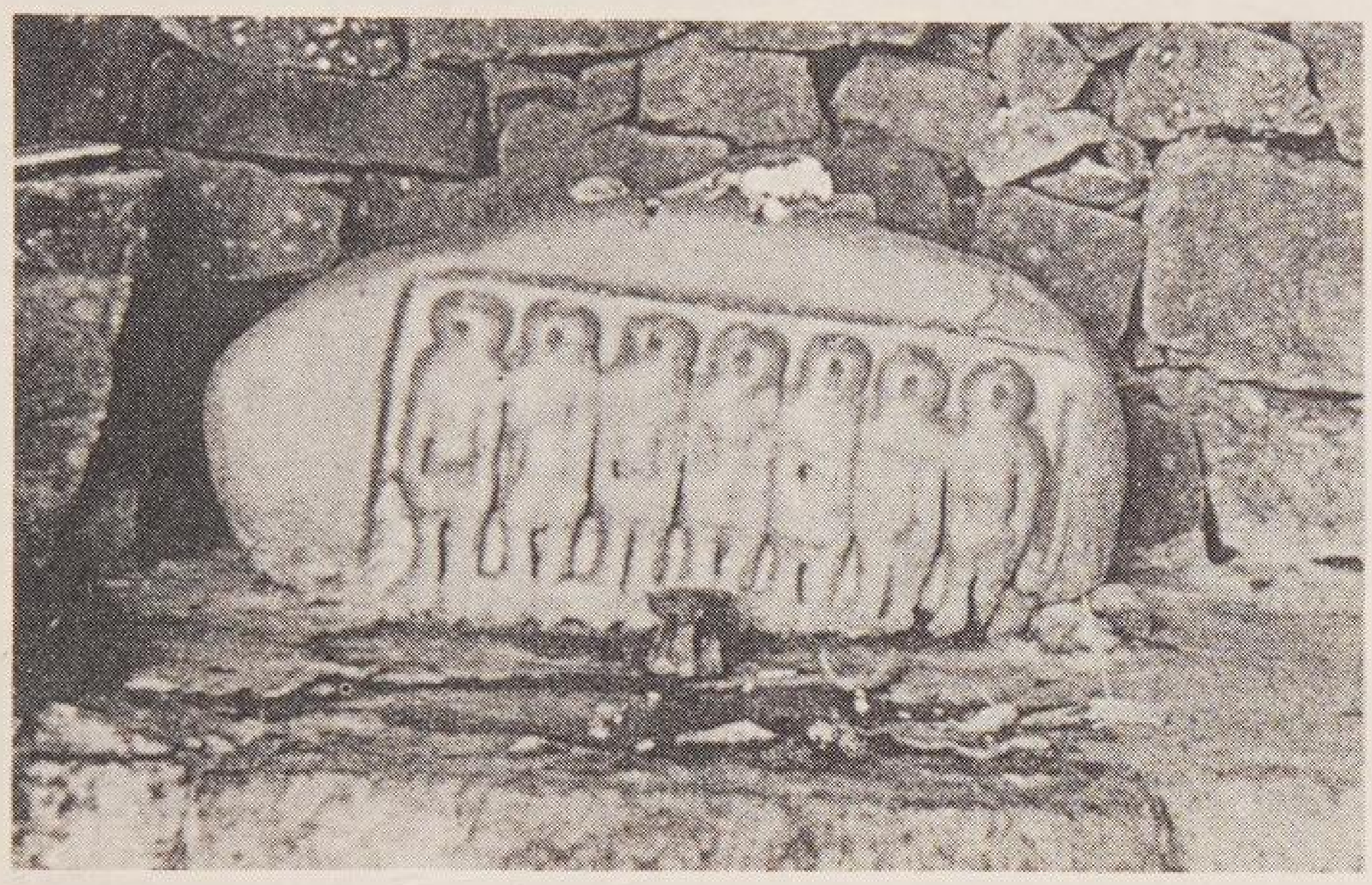
Transformation from function to ritual is evident in this 2000-year-old sandstone ring, the inner face of which is decorated with alternating human figures and plants. Rings of this kind but without decoration are found at Neolithic sites throughout India; they were used to weight the digging sticks with which the earliest farmers planted seed. By 200 BC, when this example was made, the rings were talismans rather than farmers' implements.

begins at the start of the rainy season. That such a custom could have arisen in a farming society seems improbable; the rainy months are the ones during which the farmer does the larger part of his productive work.

Other seemingly illogical mixtures of old ways and new are common in peninsular India. One example I have observed combines the plow technology of later times with a much earlier form of agriculture—the 'slash and burn' method, in which farmland is created by cutting down and burning the natural vegetation. When the farmers of Maharashtra


AFGHANISTAN
CHINA
WEST PAKISTAN
NEW DELHI
GANGES PLAIN
EAST PAKISTAN
CALCUTTA
INDORE
DECCAN
BOMBAY
POONA
PANDHARPUR
RAICHUR
BAY OF BENGAL
ARABIAN SEA
CEYLON

Peninsular India is dominated by its ancient volcanic highlands, called the Deccan, bordered on the east and west by the subcontinent's narrow coastal lowlands and on the north by a wide, rich, densely populated alluvial plain formed by the Ganges River.



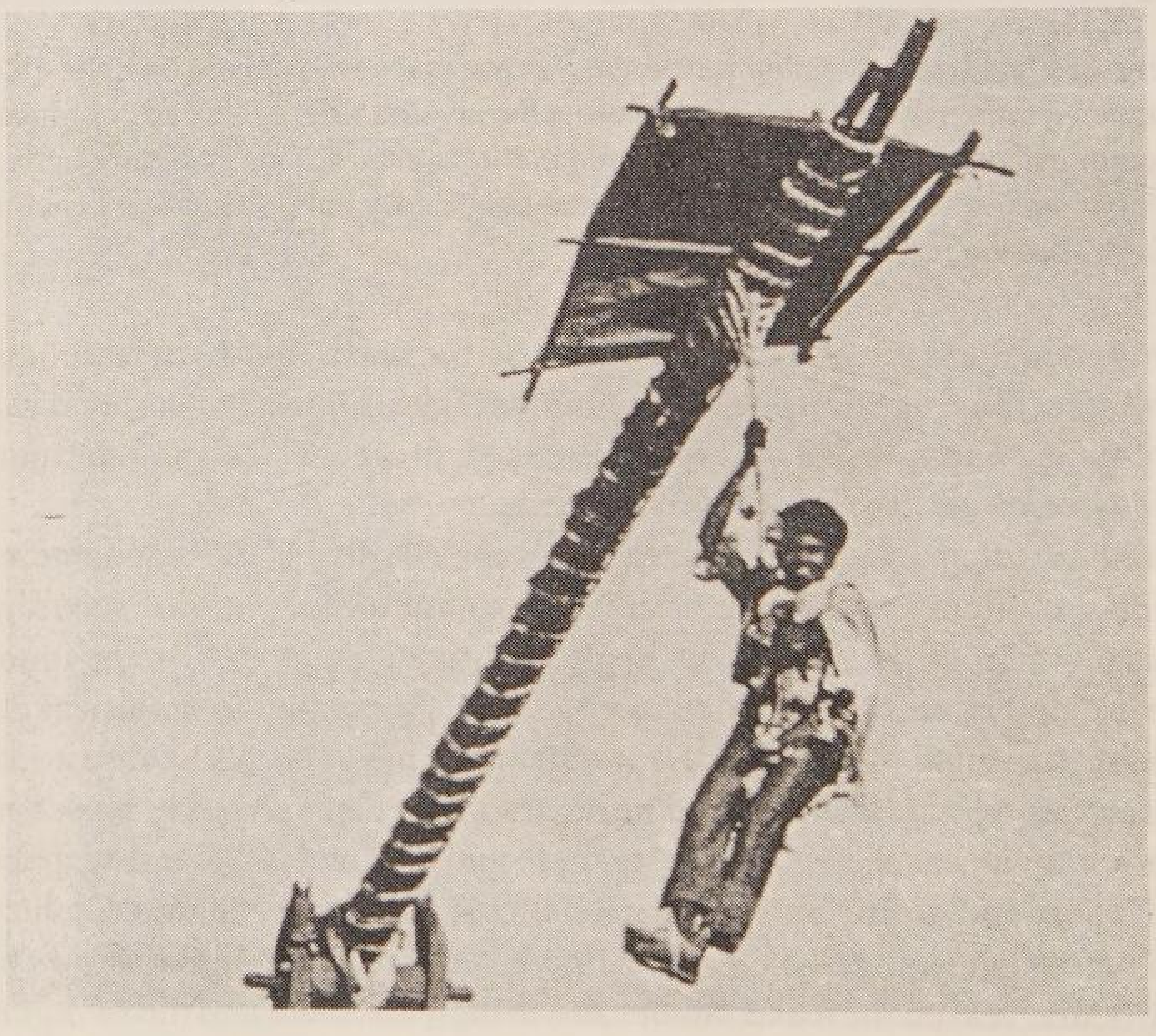
Seven Sisters, once possibly a college of priestesses who served an aboriginal mother-goddess in peninsular India before the invaders of the Deccan introduced worship of a father-god, are still revered in Maharashtra. This sculpture in their honour stands near the National Chemical Laboratory in Poona; it has a coating of red lead that symbolizes blood.

grow millet today, they clear hillsides by the slash-and-burn technique and plant the crop with the aid of primitive digging sticks. In the level valley fields where wheat and rice are raised, however, the same farmers plough and fertilize by modern methods.

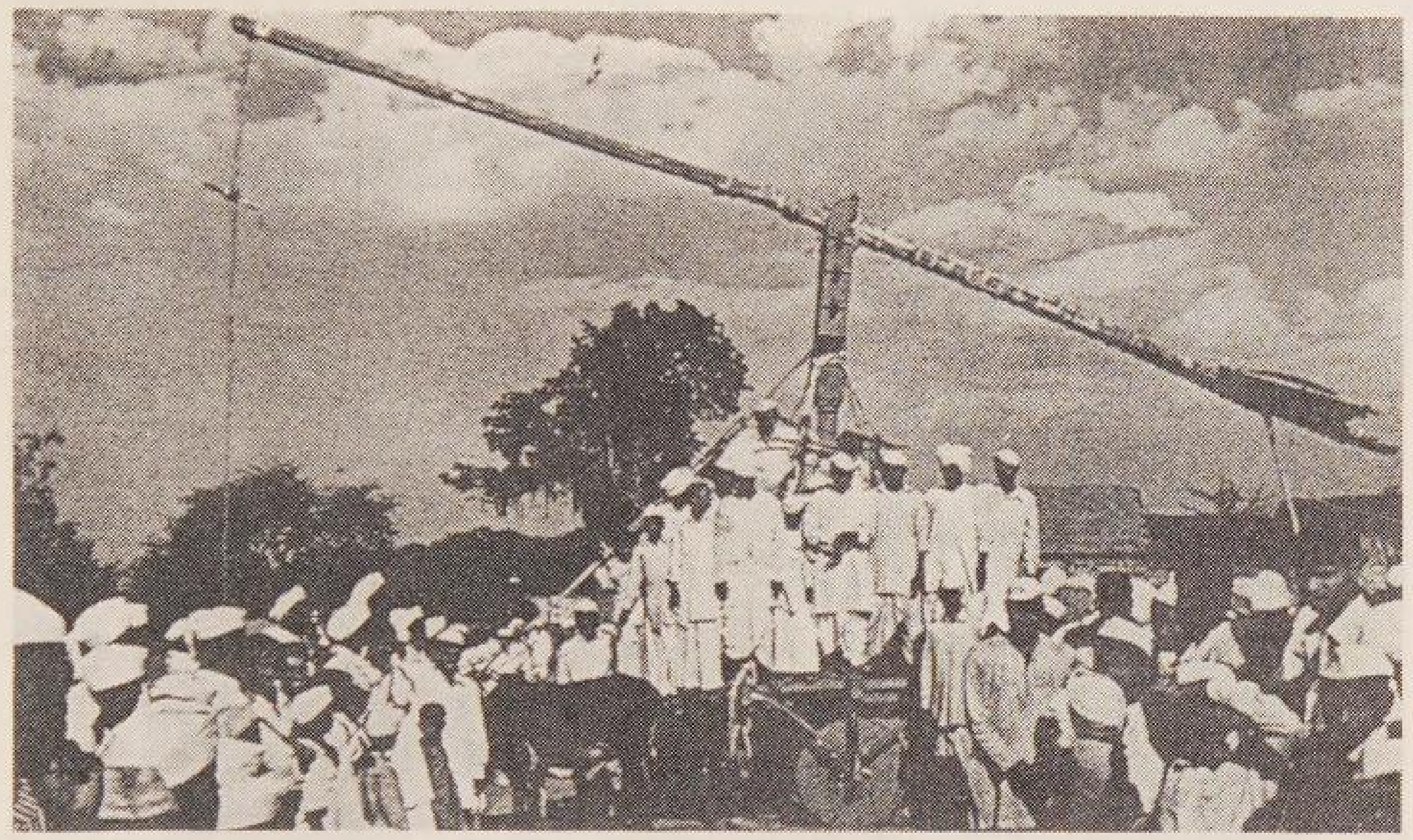
The most spectacular example of fossilized ritual I have encountered is *bagad*, or 'hook-swinging.' Both the law and public opinion discourage this practice in India today, but hook-swinging posts are still to be found near many temples throughout the Deccan. According to historical accounts the ritual required that a pair of sharp metal hooks be thrust into a selected victim's back, penetrating the flesh just above the hips. The hooked man was then hoisted clear of the ground and left to swing, painfully suspended only by the two hooks. This gruesome rite was conducted on one special day each year. Foreign observers could discover no particular reason for it and rather too willingly attribute it to the savagery of the people who practised it. None of these people had told them that to be hook-swung was a signal honour and a prerogative jealously guarded by a very few of the oldest farming families in each district.

Today hooks are still set in living flesh each year in a few remote villages. I was recently able to witness such a ceremony. I must preserve the anonymity of both the village and the participants in the ritual, but I can say that it took place at the time of the April full moon. In this village the man to be swung must be selected from among the young married men of clan X, in spite of the fact that the village headman, the leading village families and all the richest farmers are members of clan Y. This privilege stems from the fact that the earliest immigrants in the area were members of clan X, and that it was they who first heard the call of the god Mhatoba, in whose honor the ritual takes place.

In this village the two swinging posts are set up in a cart that is used only on this one day of the year. Nowadays the celebrant's weight is no longer borne by the hooks throughout the ceremony. Between swings he sits more or less comfortably astride a bar suspended from a crossbeam that is balanced between the two uprights [*see illustration*]. A new cross-



Ritual 'Victim' of the annual hook-swinging *bagad* ceremony rests on his perch as he starts off to bless all the farm fields of his Maharashtra village. Two metal hooks thrust into the small of the back were at one time all that suspended the hook-swinger through out the ceremony. To be selected for the swinging ritual is an honour that is jealously confined to the men of one clan in the village.

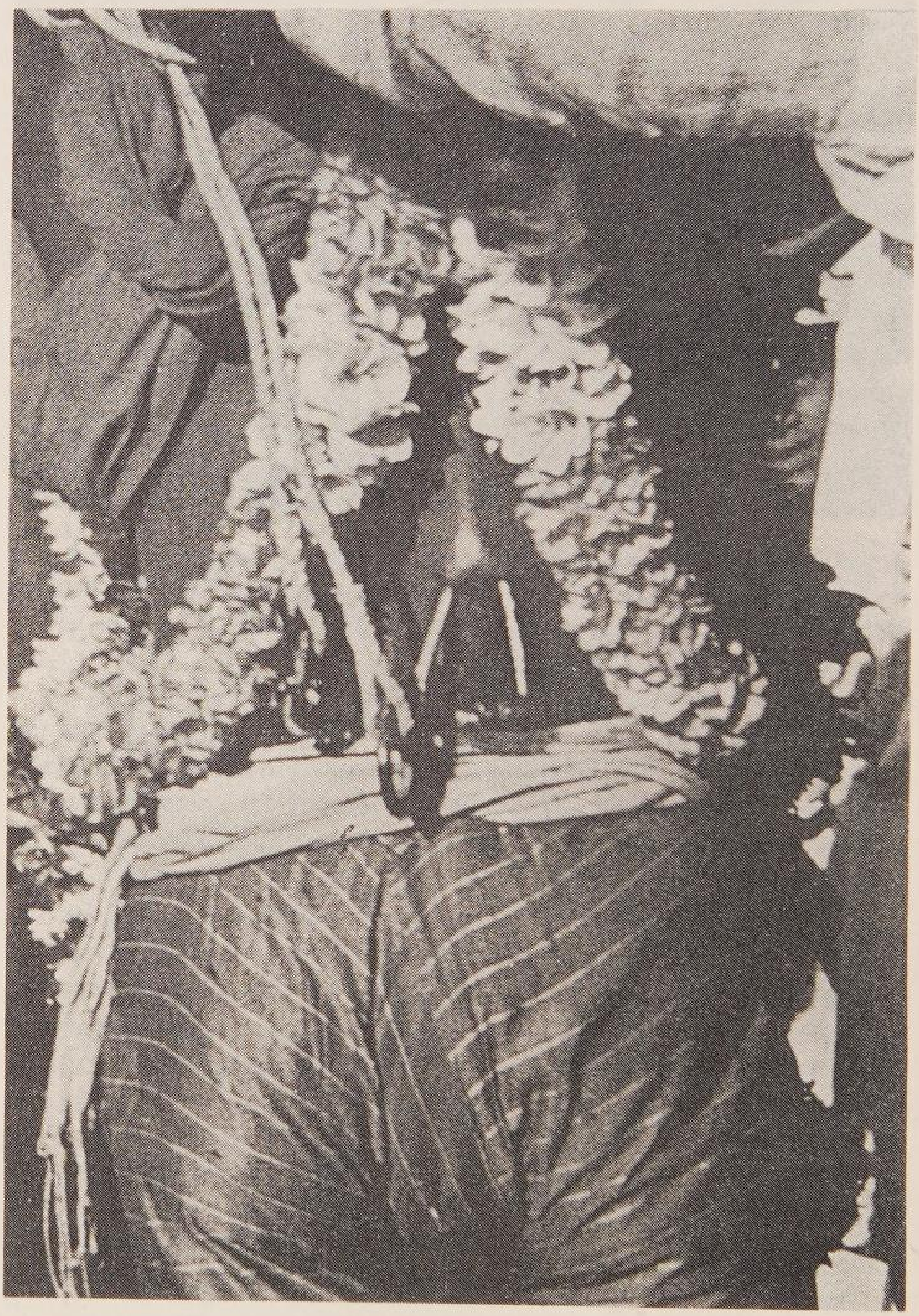


Ritual Cart on which the *bagad* uprights and swinging pole are mounted stands unused all year long except for this day. Those surrounding the cart include the electors, who annually choose a hook-swinger from among the eligible clan's young married men.

beam is ceremonially cut each year in a jungle some 40 miles from the village; this jungle is said to be the place from which clan X originally migrated. Relays of specially chosen villagers carry the beam back to the village. They are permitted to put down their burden and rest only at specific points along the way.

At the outset of the hook-swinging ceremony candidates for the honour gather with a group of electors under a specific tree outside the village. After the celebrant has been chosen the electors and the candidates return to the village, running through a sacred course in groups of three. The man in the middle of each trio is a member of clan X; he is flanked by men of clan Y. The celebrant and his two escorts are the last to run the course. When they have done so, the celebrant is led to the local temple. There he is ritually bathed, declared *deva* (temporarily divine) and dressed in a special costume (a red turban and red silk trousers) that leaves him naked from the waist up.

The celebrant now goes to the site of the village's annual *holi* (spring festival) bonfire. He stands on the fire's ashes as the village carpenter thrusts the two steel hooks into the small of his back [*see illustration*]. Every man in the village crowds around to watch the operation. The celebrant is then decked with garlands and led to a nearby field. There the *bagad* cart, drawn by a pair of bullocks, is waiting. A rope that is attached



Hook-swinger, ritually dressed in silk breeches and garlanded with flowers, is about to be tied to the swinging pole by means of the ropes attached to the two hooks that dangle from his back. The author found that hook-swinging was a substitute for human sacrifice.

to each hook is looped behind the celebrant's back and tied to the crossbeam, which rests on the two *bagad* uprights. The celebrant individually blesses each child born since the last hook-swinging; when this has been done, he makes his first swing suspended by the hooks. A cheer goes up, the god-elect nimbly climbs astride his resting bar and the cart jolts off across the fields.

At prescribed points along the route the cart stops and the celebrant descends from the bar to make a predetermined number of swings. After all the village's fields have been blessed in this manner, the procession continues through the fields of a neighboring village to the place where the god Mhatoba's temple stands. The people have gathered from miles around. A number of goats are now sacrificed, the order of their slaughter being established by the rank of the clan offering the sacrifice.

When the sacrifices are over, the hook ropes are united from the *bagad* beam and the god-elect climbs down from his bar. He enters the temple, the hooks are removed and his wounds are anointed with ashes from Mhatoba's sacred fire. Once this is done the god-elect reverts to human status. During the ceremony I observed, the celebrant was in a state of exaltation and showed no trace of pain. Although he received no medical treatment other than the application of wood ash, two weeks later the marks on his back were scarcely visible.

When I asked about this village tradition, I was told that the form of the hook-swinging ceremony had originally been quite different. In the 'good old days', my informants said, the god-elect from clan X was killed at the end of the procession, along with another god elected annually chosen from the low-caste clan Z. The two men were beheaded, their heads were set on stone slabs that are still in place in front of Mhatoba's temple, and Mhatoba's ceremonial palanquin was paraded over the grisly offerings. I was told that the original practice had been continued until only one male member of clan Z remained alive. At that point, it was said, Mhatoba himself appeared and declared that life need no longer be taken. It would suffice, he said, if on the sacred day the elected representative of clan Z had his thigh ceremonially cut and the representative of clan X was hooked and swung. In fact, my informants told me, the thigh-cutting ritual is still followed each year within the temple. The representative of clan Z has his thigh cut at the same time the hook-swinger descends from his cart. Like the hook-swinger's wounds, the clan Z celebrant's wound is anointed with ashes from Mhatoba's sacred fire.

What are the prehistoric elements in this bizarre tangle of ritual and tradition? For that matter, how much of the supposed tradition is actually credible? As a start, I see no reason to doubt that human sacrifices really took place in the 'good old days'. Although human sacrifice was eliminated from formal Hindu ritual before the sixth century BC, the custom continued in many parts of India until recently. To judge by today's police record of ritual murders, human sacrifice is still practised among a number of tribal peoples.

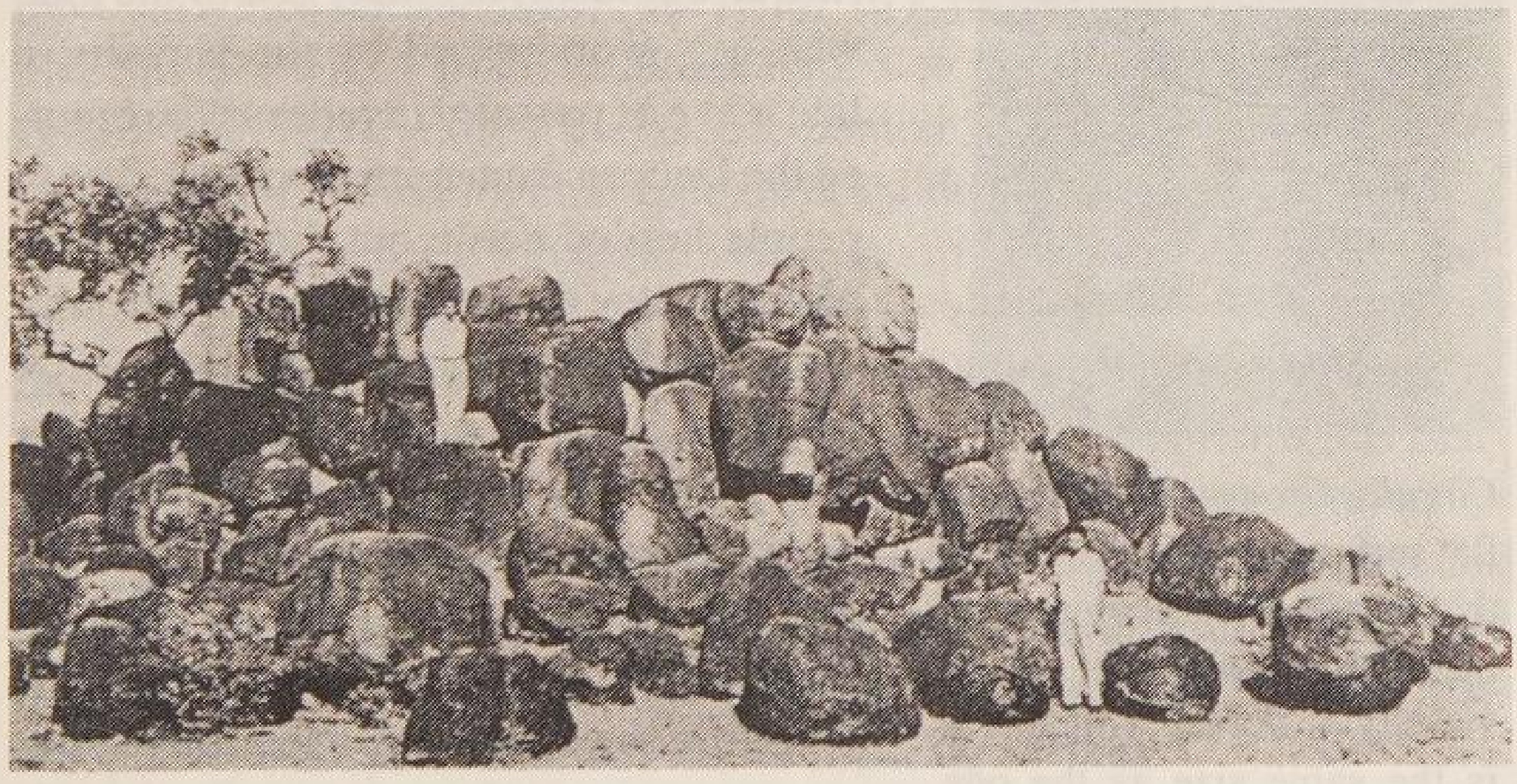
As recently as the 1780's the Brahman rulers of Poona, wishing to ensure the impregnability of Lohogad Fort, saw to it that a young married couple was buried alive under the fort's foundations. An unmarried man was similarly sacrificed by the Moslem builders of Chakan Fort; a cult in his honour survives to this day. Not all the victims of human sacrifice went unwillingly to their death. Evidence is provided by the barber caste of Kurkumbh, which is proud to hold first place in worship at the shrine of the goddess Phirangai. The barbers' priority is traditionally based on a feat performed by a member of the caste who had been given the task of escorting the goddess to Kurkumbh from her former residence some 200 miles away. The goddess agreed to make the move, with the usual kind of fairy-tale provision that she would travel no farther than the first place at which her escort turned his head and looked behind him. The barber resisted temptation all the way, starting fixedly before him until he reached Kurkumbh. On his triumphant arrival he volunteered on the spot to make a sacrifice of his unturned head.

Assuming that the account of Mhatoba's original bloody rites is authentic, how are these rites related to the prehistory of peninsular India? An answer to this question requires an examination of the deity's history. Mhatoba is a god to whom tradition assigns two distinct places of origin. One is the same jungle, 40 miles from his present temple, from which his worshippers procure the *bagad* crossbeam each year. Here Mhatoba has a second temple. It stands on a hillock, at the base of which I have found a fair number of crude microliths; the presence of these stone tools is good evidence that the area supported a prehistoric population. At this place of worship Mhatoba is called Bapuji-Baba, or 'Father-God', and it is dangerous for any woman to approach him.

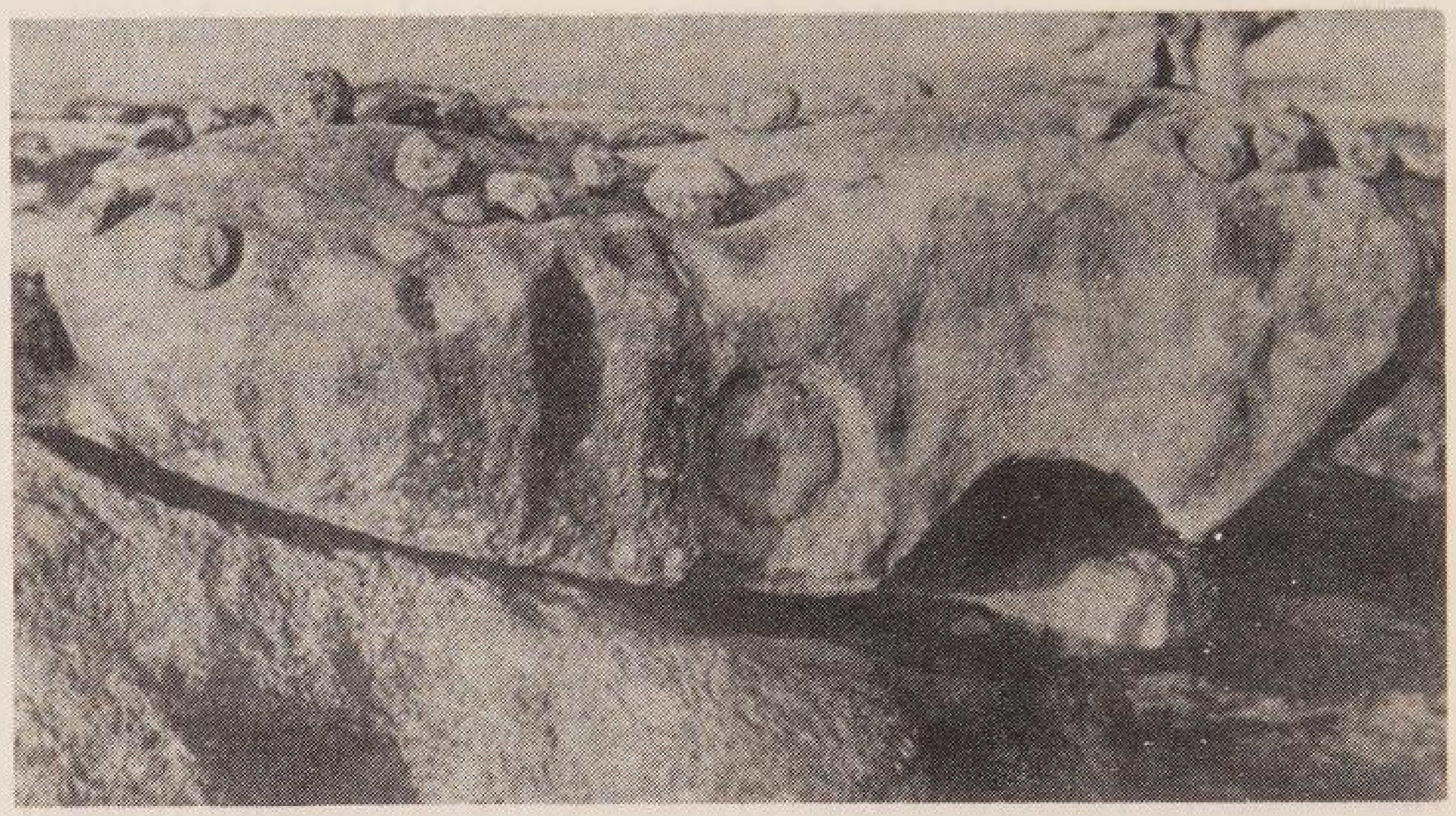
Mhatoba's other place of origin is about the same distance from the hook-swingers' village but in a different direction. The site is unmarked, but tradition states that at this place the deity first appeared and immediately made his presence known by kidnapping seven virgin sisters. Mhatoba thereupon travelled cross-country to the vicinity of the hook-swingers' village, where he paused by a pool in the river. There, for no known reason, he drowned all seven sisters. When a passing member of the Koli tribe ventured to criticize Mhatoba's behaviour, the god drowned him as well. Near the pool today there is a shrine to the seven sisters and the unfortunate Koli. The pool itself is considered cursed. No one bathes there, nor is its water used for farm animals. Within the shrine the crude representations of the seven sisters are coated with red lead, which is commonly used by Indian villagers as a substitute for the blood of sacrificial animals [*see illustration*]. I have found surface deposits of microliths nearby, as I did at the temple where Mhatoba is known as Bapuji-Baba.

In spite of his murder of the kidnapped maidens, Mhatoba is known in one aspect as a 'married' god. Next to his statue in the hook-swingers' temple stands a statue of a goddess named Jogubai. The hilltop Mhatoba, with his reputation for being dangerous to women, has no such consort. Why should the god be single in one aspect and married in the other? To find the answer I undertook a survey of all the district's temples. I quickly learned that the goddess Jogubai, like Mhatoba, was worshipped in several places, although there was no tradition that she had come to the district from some other region. I also encountered several more Mhatobas. In many places Mhatoba and Jogubai were 'married', as they are at the hook-swingers' temple. In other places, however, either the god or the goddess was worshipped alone, and the local worshippers knew nothing about Mhatoba or Jogubai being 'married' elsewhere.

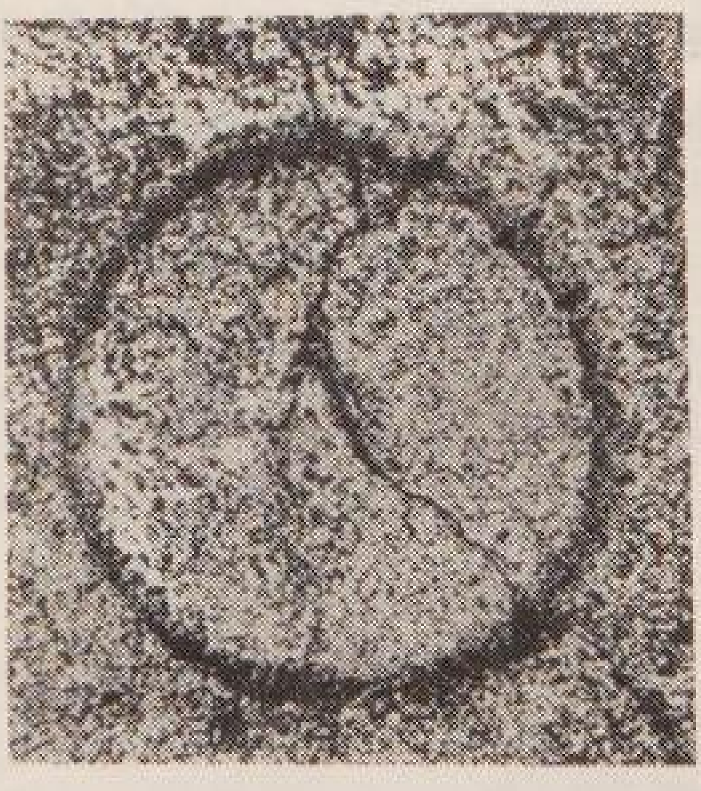
It is my belief that Mhatoba and Jogubai are a pair of deities who originally belonged to two different population groups and quite probably



Megalithic Monument, erected by prehistoric inhabitants of the Deccan, has become the centre of a modern cult. The object of veneration is an unhewn stone, called Manzrai, or 'Cat Mother', that lies under one of the boulders in the middle of the pile.



Goddess's Shelter is the dark hollow (*right*) under one stone of a prehistoric megalithic monument near Poona. The deity, whose worship only began in the eighteenth century, is a huntress named Bolhai. The deep circle cut into the boulder is 12 inches in diameter, a size characteristic of most of the circles that decorate the megalithic monuments of the Deccan. It was probably outlined with a hand, the thumb and little finger acting as a compass.



Circular Groove decorates the flat surface of a basalt boulder that is part of another ancient megalithic monument in the vicinity of Poona. This circle is the same size as the one shown in the illustration.

to different eras of prehistory as well. As I interpret the evidence, Mhatoba was at first an aggressively male god of the kind who was worshipped by the Gavalis, a late wave of pastoral invaders who entered the Deccan from northern India. These people herded cattle but did not use the plough. They reached Raichur in the middle of the Deccan plateau by about 2000 BC; recently obtained carbon-14 dates indicate that they were still practising their pastoral way of life as late as 1000 BC. The preceding wave of pastoral invaders from the north herded sheep and goats; therefore the skins they used for various purposes were the comparatively thin sheepskin and goatskin. The Gavalis had to work with thick cattle hides, and accordingly their microlithic tools were somewhat heavier and coarser. This difference is evident in the microliths found near the Bapuji-Baba temple.

Jogubai, on the other hand, is the kind of mother-goddess I associate with the earliest inhabitants of the Deccan: the primitive food-gatherers. These are the same people who with enormous effort erected all over peninsular India hundreds of megalithic monuments consisting of large piles of boulders. After they had piled the boulders together they also marked them with deep grooves. It is an interesting coincidence that wherever a modern cult is associated with one of these ancient megalithic monuments it is almost without exception a mother-goddess cult.

If it is correct to assume that the mother-goddess was first in the area and that the father-god was a pastoralist intruder, how do the traditions of the hook-swingers' village fit such a sequence? In their temple goddess and god are joined in 'marriage'; I take this to be symbolic of a situation in which conflict between food-gatherer and pastoralist was resolved by peaceful fusion. The virgins drowned by Mhatoba might represent a sacred college of priestesses dedicated to the worship of the mother-goddess. The fact that Mhatoba is now married to Jogubai shows that even the destruction of her priestesses was not enough to suppress her worship.

The conflict between mother-goddess and father-god could not have been resolved peaceably everywhere. Throughout Indian theological art, from the earliest representation of a horned 'proto-Shiva' on Harappan seals of the third millennium BC to gaudy pictures sold in Indian bazaars today, runs a theme of conflict between a female deity and a 'buffalo demon', in which the goddess is the victor. In Kalighat paintings, for example, Shiva's wife Parvati tramples him. The goddess Durga-Parvati is called 'she who tramples the buffalo demon.'

In this connection Jogubai appears in another temple in the district not in the role of consort to Mhatoba but as consort to the more primitive male deity Maskoba, who is recognized as the counterpart of the buffalo demon. Just as the union of Jogubai and Mhatoba in the hook-swingers' temple can be taken to symbolize conflict resolved, so perhaps this marriage to the buffalo demon symbolizes conflict perpetuated. This much is certain: The prehistoric fusion of two distinctly different societies has left marks that remain to this day. Indeed, in some parts of the countryside both the buffalo demon and the goddess who tramples him are worshipped by the same believers but in separate shrines.

Two points, however, should be made clear. First, although instances of goddess-worship are still to be found all over India, there is no reason to believe the country's prehistoric food-gatherers were worshippers of a universal mother-goddess. To attribute any universal custom to primitive and segregated peoples is obviously hazardous. Second, it is important to emphasize that even when some ancient monument is found to be a centre of goddess-worship today, there is little possibility that the modern cult represents a survival from prehistory. The early food-gatherers had no fixed abode and the early pastoralists were constantly on the move; accordingly any continuity of worship at a single site is implausible.

Nonetheless, coincidence can sometimes achieve what piety cannot. At the village of Theur the goddess of childbirth is worshipped at a megalithic monument that stands on the summit of a prehistoric mound. This goddess—Satvai, or 'Mother Sixth'—takes her name from the fact that sacrifices are made to her on the sixth day after the birth of a child. The boulders that compose the monument at Theur are of a stone so hard that it will turn the edge of a modern mason's chisel. Yet every one of them bears smooth grooves with a semicircular cross section, some over an inch in depth, that were evidently produced by patient rubbing in prehistoric times. Prominent among the grooved designs is a representation of a cowrie shell, the traditional symbol of the female. It appears certain that the deity worshipped at the Theur monument thousands of years ago was a goddess just as the deity is today. Here, with the Pardhi snarers, the Dhangar shepherd and the hook-swinging devotees of Mhatoba, is further evidence that the prehistory of India is still alive.

3

On a Marxist Approach to Indian Chronology*

The late D.A. Suleikin's note† on the periodization of Indian history contains just criticism of our historians, along with some dangerously misleading statements. These last force me to repeat briefly some of my own conclusions published elsewhere over the last ten years.

1. Only the fullest agreement can be expressed with the main principle, namely that historical periods must be demarcated according to the means and relations of production, not by fortuitous changes of dynasty or battles. Even here, it can be recognized that major wars, great changes in rulers, significant religious upheavals do often signalize fundamental changes in the productive relations of the people. That such critical changes manifest themselves through wars or reformation in religion is due to the undeveloped stage of society with its attendant concealment of the true social forces guiding or forcing historical development. That history as written by most bourgeois scholars confines itself to these superficial manifestations is due in part to archaic tradition, but in still greater measure to the bourgeois author's denial of the class struggle within his own society. A critical approach to the class basis of former periods implies a similar approach to the author's own period, which would lead to unpleasant truths.

When all this is said, we come to the objections that must be raised. These are:

(A) India is not a mathematical point but a very large country, a subcontinent with the utmost diversity of natural environment, language,

Annals of Bhandarkar Oriental Research Institute, vol. 31 (1951), pp. 258–66.

† [The note mentioned here appears to be: D.A. Suleikin, 'Osnovnye voprosy periodizatsii istorii drevnej indii' in *Ucenye Zapiski Tikhokeanskogo Instituta*, Tom. II. Indsiskÿ sbornik, Moskva/Leningrad, 1949, pp. 177–92.]

historical course of development. Neither in the means of production nor in the stages of social development was there overall homogeneity in the oldest times. Centuries must be allowed to pass before comparable stages of productive and social relationships may be established between the Indus valley, Bengal, and Malabar. Even then, important differences remain which makes periodization for India as a whole almost impossible, except with the broadest margins.

(B) A given ancient document may in general imply a certain form of production, but it is rarely possible to date it (as Suleikin himself noted) and often impossible to determine its locality. Thus Suleikin's quoting from the latest additions to the *Aitareya Brāhmaṇa*, and from the *Jātakas* (which are on the same level as fairy stories, but composed long after king Aśoka) is particularly unfortunate. No such work can apply—even when its statements are not fabulous or purely imaginary—to the whole country. Often, the work indicates nothing more than the false expansion and generalization of a narrow local tradition which has been merged with others but given special weight because of the class or sectarian bias of the redactor. This is a concomitant of the hierophantic tradition and approach; for to the priesthood, only the lunar month and days are of importance for ritual: only in Jain records are the years at all reliably kept, simply because that community had a large proportion of traders to whom the succession of years meant something. The best that can be done with Brahmin records is to group them into broad chronological strata, before analysis of each layer upon its own merits. Otherwise, like Suleikin, one has to flit lightly from century to century and across thousands of kilometres.

(C) The disastrous consequences of combining and universalizing local traditions are manifested in several ways. The first is that simultaneous events are arranged in a fictitious sequence, thus cracking the very foundations of a chronological structure. Only a Pargiter can look into Purāṇic king-lists with aplomb and pass smoothly over contradictions. A second difficulty is that the meaning of crucial terms is apt to change, or be lost altogether. This is made peculiarly easy by the priestly control of the Sanskrit language which led to secrecy (as with the Druids of Gaul), to reliance upon memory rather than writing, hence to versification and ambiguity; contrast the difficulty of getting any clear meaning out of a Sanskrit passage, with the comparative lucidity of Greek or Latin prose.

2. What, then, are the actual possibilities of a scientific Indian chronology? Beginnings have been made by noting the citations in each author, whereby a sequence may be found. This has to be done on a vast scale

before location of the material as well as chronology become satisfactory. Restricting ourselves to the handful of published scriptures will not suffice; only the citation method followed on a large scale can tell us something reliable about time and place. A further step is tracing the first mention of social customs, first use of specific techniques, first appearance of particular foodstuffs. Both these methods have been initiated by Prof. P.K. Gode's systematic work, but need powerful extension. For example, the coconut so basic today in almost every Brahmin ritual has no scriptural authority, being in fact an import from the south-east (probably Malaya) not earlier than the Christian era, and certainly little cultivated before the fourth century AD. The sacred animal is the cow, but without the water-buffalo the swampy lands of the Gangetic basin could not have been made productive; this most important animal was not generally tamed till the age of the Buddha, if that early. There is no direct record of such important additions to the Indian means of production.

Only primary archaeological work can help us to evaluate the content, to fix the meaning of our written sources. It was not so long ago that European scholars, relying solely upon records, dismissed the Buddha as a sun-myth. We know that though particular episodes of the Iliad may be fictitious, Troy did exist, and there is evidence for its having been sacked by the Achaeans. Was there actually a Mahābhārata war? What does Rāma's legendary invasion of Laṅkā represent? No answer will be forthcoming unless someone digs at the right places. Indian archaeology is still at the bourgeois-colonial stage of digging for museum exhibits that look impressive to foreigners. The recent attempts at a reasoned stratigraphy have yet to be extended systematically to the whole country. Our chronology cannot begin till carbon-14 analysis of wood and charcoal, dendrochronology, and other such techniques are widely employed.

3. On the position of slavery, it is necessary to deny flatly the general stand taken by Suleikin, who seems to have been carried away by European parallels. Debt-slavery still exists in parts of Gujarat and Sind. My grandparents on both sides held family slaves of low birth, the *bande* of Goa. But these slaves were not to be bought or sold, none of these types ever having performed any indispensable function in the relations of production;[1] their total number was negligible.

It is very surprising that Suleikin dismisses so lightly the statement of Megasthenes that there was no slavery in India (cf. *Arthaśāstra* 3.13 = 65, with Megasthenes in Strabo xv. 1.59, Diodoros Siculus ii, 39 and Arrian *Indika* x, end). Our Soviet writer goes so far as to state: 'It is true that ancient India knew of no large slave-owning enterprises, but the essence of the matter does not change because of this'. Apparently, the essence of the matter is a fixed opinion that no amount of negative evidence can change.

Clearly, Indian slavery was not recognizable as such by the Greeks and Romans. Chattel slavery can never have had any significant role in Indian production. Human beings traded like cattle for heavy labour in the mines and fields is a feature of classical European economy, never of the Indian. Caesar's account of the Gallic wars and Xenophon's *Anabasis* tell us that slaves were a regular part of even the common soldier's booty. Neither inscriptions nor literature mention the numbers of slaves taken after a battle in India. There is no trace of slave marts, or caravans of slave traders. The *dāsa* is a house-servant, or bondsman. So far from slaves being property like gold, jewels, cattle, Jaimini (*Pūrvamīmāṁsā-darśana*: vi. 7.5.6) expressly separates them from all other forms of property. But note that to him *dāsa* and *śūdra* are virtually synonymous, as to so many other writers.

Thus the Indian method for expropriation of a whole class of labour made no use of slavery after the Graeco-Roman model. Before the Aryans, we had a considerable urban civilization, comparable to the early Sumerian, in the Indus valley. It would be incredible that this had been built up without class divisions, without a large, surplus-producing, agrarian population. The Aryans destroyed this culture down to its foundations; the *Ṛgveda* sings of Indra's having destroyed the cities, shattered the dams of the Dasyus or Dāsas, but never of building either, or digging canals for agriculture. I have shown elsewhere that some of these pre-Aryans were absorbed into the Aryans, the Brahmin priesthood being due at least in part to this admixture. Ample traces exist in the *Ṛgveda* of progressive recombination, Aryanization of indigenous peoples, constant warfare among these newly developed tribes. This is not merely conquest but a fundamental change such as the Battle-axe people brought to cruder Mesolithic cultures in Europe; comparable, though on a higher level, to the decline of the Erösd and Tripolye matriarchal cultures. But what happened to the vast majority of surplus producers, who found no place among the reorganized Aryans?

The word for caste *varṇa* means colour. In the *Ṛgveda*, there are only two human *varṇas*, that of the Aryans and that of their *dāsa* opponents. But the later *dāsa* not only means slave but denotes also the Śūdra caste: a class of people defined generally by birth, not eligible for initiation, barred from reading scriptures, wielding weapons, owning property—one whose function is to serve the three Aryan castes. In a word, a *helot*, not a slave. Slavery did not develop in India because at the time of the invasion (which Suleikin virtually ignores) the conquerors had tribal property, not private property. The Śūdra caste therefore begins as slaves of the community as a whole, only later tied to the soil or to patriarchal households for menial labour. The initial position is nearest to that in Sparta, where the richest male Spartans formed a permanent armed camp to suppress the helots with the help of the marginal allies, the *Perioikoi*. The Indian caste system and religion performed the function of naked violence. Observe that the very passage of Nārada cited by Suleikin goes on to give circumstances under which the various types of slaves could be manumitted, for that slavery amounts to contract labour; but there is no method except monkhood whereby a Śūdra loses his caste, and monastic orders were usually closed to the Śūdra in practice; particularly and explicitly to a runaway bondsman. Lastly, whereas a code like that of Hammurabi deals with existing relationships, one can never be certain with works like Nārada just how much is traditional or even purely imaginary.

Naturally, the non-priestly and non-fighting portion of the recombined 'Aryans' sank to an inferior status, the Vaiśya *varṇa*. The internal development of caste-classes is the inevitable consequence of the external. The Vaiśya's lowered position is neatly reflected, even in the *Ṛgveda*, by the lowered status of the Maruts. Originally group-gods and clan-gods, they become companions of Indra, subordinate to him, exploited by him. The Agastya hymns at the end of the first *Ṛgveda* book show this decline. The *Śatapatha Brāhmaṇa* says quite bluntly that the Maruts are the common peasants, the clan-people (albeit above the Śūdras) and the peasants are food for the warrior class (*Ś.B.* v. 2. 1. 17, v. 1. 3. 3, v. 3. 1, 6, ix. 3. 1. 13, xiv. 1. 3.27). Conquest followed by constant warfare had its inevitable effect upon conquerors as well as conquered. But we must not forget, in our disgust at the backwardness and human degradation imposed upon India by the caste system, that the system at its beginning advanced production, being so eminently suited to local conditions that it had to develop. It opened up the wilderness to the east of the Punjab for the new type of settlement; it prevented the formation of large-scale chattel slavery, real slavery in the Greek or Roman sense; it permitted the enrolment of newer tribes, later also of guilds, in the artificial *Manusmṛti* scheme of mixed castes. This was done on the basis of religion which minimized the need for internal violence, thereby leading all social manifestations of the class-struggle in India into religio-philosophical channels of expression. In this sense, caste is the negation of history, so that it is not in the least surprising to find that Indian literary tradition has virtually no historical sense or content. What is surprising is that a supposedly Marxist writer should have ignored all this.

4. To recapitulate: just as the word *slave* is derived from the low Latin *sclavus* which denotes a particular people from whom a large number of slaves were recruited, the Indian *dāsa* in Ṛgvedic times means a set of tribes hostile to and generally beaten by the Aryans. The word *dāsa* early went through a development parallel to that of Latin *servus* which started by meaning slave, to end as servant, retainer, serf. The older Roman patrician would have been puzzled by the idea of a menial who was not a chattel slave while his Indian counterpart would have found it impossible to comprehend how parsimonious Cato could sell off superannuated *dāsas* indiscriminately. The Near East had other simultaneous types of slavery nearer to the kinds mentioned in our *smṛtis*. The famous Gadates inscription of Darius at Branchidae shows that the Babylonian *qallu* could be equated to the Persian *bandaka* and Greek *doulos*; yet the context proves that some temple slave labourers could be supported in idleness, while a powerful *satrap* was addressed by his master the king as a slave without losing his nobility. Neither of these would be possible for the Greek *doulos*.

There were two main reasons why the Greeks could not recognize Indian servitude as being within their concept of slavery. First, leading Greeks, Romans, Ionians, Phoenicians, Carthaginians could and did take part in trade and finance, having advanced the manufacture and exchange of commodities to the stage of taking minted money as the principal measure of value, means of exchange, symbol of wealth. On the other hand, those Indians who would deal most with visiting Greeks, the Indians who lived mainly by commodity exchange or cash transactions, were a small fraction of the Vaiśya class and caste, having virtually no control over the state mechanism, and little over the general means[2] of production; hence none over religion, literature and drama. The slave trade as such did not exist in India, whence slavery could not possibly mean the same thing to them as to the Greeks. The second reason comes directly from the caste system: the great Indian source of expropriable labour was the Śūdra, who was the *dāsa* in general throughout the post-Vedic period down through the classical age and even later. The Śūdra could not be manumitted. *Manusmṛti* 8.414 tells us explicitly: 'Even if released by his master, the Śūdra is not freed from servitude; it (servitude) is his lot by nature, who can remove that from him?' Every European slave of the classical period could be manumitted, bought, or sold. The inferior position of the

European freedman arose from the fact that as a slave he had lost his *gens* while manumission did not mean adoption into any *gens*; hence the peculiarly uncertain status of a *liberlinus* in a gentilic society. For the Śūdra, there was no escape. The Śūdras are in some ways paralleled by the Babylonian *śirqūtu*, or Palestinian *netīnīm*, two classes of Near Eastern temple slaves.[3] There is the strong possibility that the formation of the caste was helped by the pre-existence of such temple slaves at Harappa—an institution for which there is some archaeological support in the barrack-like quarters found.

It is interesting to compare the earliest, perhaps the only, recorded Indian impression of Greek slavery (*Majjhimanikāya* 93, the *Assalāyana-sutta*): '*sutaṃ te, yona-kambojesu aññesu ca paccantimesu janapadesu dve'va vaṇṇa: ayyo ca dāso ca; ayyo hutvā dāso hoti, dāso hutvā ayyo hoti*'. The Buddha is reported as saying to the young Brahmin Assalāyana, 'Thou hast heard that in Yona, Kamboja, and other (adjacent) frontier regions, there are only two castes: Aryan and Dāsa. One having been an Ārya may become a Dāsa, one having been a Dāsa may become an Ārya'. Of course this could not be a sentence of the Buddha, for it must date after the time when the Macedonian invasion had spread the Ionian name as well as Greek slave trade to Afghanistan. The discourse is directed against Brahmin claims to be the pre-eminent caste by birth; therefore if *varṇa* meant only class (as Suleikin would have it) and not caste, the whole point of the *sutta* would be lost altogether. However, the most interesting thing here is that the Indian could best grasp Greek slavery as the equivalent of a caste, being surprised that such 'caste' could be changed about at times with the other, the caste of free men—who had no rigid barriers among themselves to marriage and free social intercourse such as caste divisions would have entailed and such as existed between slave and free. He could no more imagine a society without caste than the Greek could without chattel slavery, just as the bourgeois cannot envisage a classless society except as wild, lawless anarchy.

When commodity production is not of prime importance, human labour cannot become an essential commodity, whence human beings will not be needed as chattel slaves. If the main production be agrarian, it suffices to tie the worker to the land. Slave labour always tends to be standardized by its lowest, cheapest, and least productive form, that of the drudge whose muscular energy is the source of crude power. As soon as commodity production by power-driven machinery comes into its own, the discovery has inevitably to be made that the prime surplus-producing commodity is not the human being but only his labour. This is most efficiently productive when the human labourer is 'free' to sell his labour, unfettered by tribal, guild, feudal, or religious bonds—and also unhindered by such distractions as ownership of the land or means of production. The new social theory then regards class divisions as just, as part of the very order of nature, precisely as caste, slavery, or serfdom had been at earlier levels.

ENDNOTES

1. D.R. Banaji: *Slavery in British India* (Bombay, 1933) deals with major forms of slavery that remained between 1772 and 1843.
2. Marx comments specially upon the main characteristic of primitive Indian production: 'In the primitive communities of India there is social division of labour, but the products of this community production do not become commodities.' (*Capital* I. i. 2). A little earlier we have a passage inserted by Engels as clarification: 'The medieval peasant produced cense-corn for the seigneur and tithe-corn for the priest; but the fact that they were produced for others did not make commodities of cense-corn and tithe-corn. To become a commodity, a product must pass by way of *exchange* into the hands of the other person for whom it is a use-value.'
3. I. Mendelsohn: *Slavery in the Ancient Near East* (New York 1949); B.P. Dougherty: *The Shirkutu of Babylonian Deities* (Yale Oriental Research Series 5/2).

4

Stages of Indian History*

1. *Historical Theory*

'In the social production of their life, men enter into definite, necessary relations that are independent of their will, relations of production that correspond to a definite stage of development of their productive forces. The sum total of these relations of production constitutes the economic structure of society, the real foundation on which a juridical and political superstructure arises, and to which correspond definite forms of social consciousness. The mode of production of material existence conditions the whole process of social, political, and intellectual life in general. It is not the consciousness of men that determines their being, but on the contrary, their social existence that determines their consciousness. At a certain stage of their development the material productive forces of society come in conflict with the existing relations of production, or—what is but a legal expression for the same thing—with the property relations within which they had moved hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an epoch of social revolution. With the change in the economic foundations the whole vast superstructure is more or less rapidly transformed. In considering such transformations, it is necessary always to distinguish between the material revolution in the economic conditions of production, which can be determined with the precision of natural science, and the juridical, political, religious, aesthetic or philosophic—in short, ideological forms in which men become conscious of this conflict and fight it out'.

This quotation from K. Marx's preface to his own *Critique of Political Economy* says in profound and inspiring words just what human history

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has been to date. For us, then, *history is the development in chronological sequence of essential stages in the means and relations of human social production.* This type of history can be written for India, though no real attempt has hitherto been made. Considerable technical difficulties intervene, for we have always to guess at the basis from what remains of the superstructure, to restore the means and relations of production from religious documents not properly edited, which themselves contain various layers of tradition. The meaning of key words changes with the basis; some outward forms and observances may remain unchanged through great transformations of the foundation.

The main advances may be taken as follows: (1) The urban but stagnant Indus valley culture (3000–1500 BC) which left its mark on later technique, iconography, and probably social institutions. (2) Aryanization, i.e. late bronze and early iron age pastoral-nomadic tribal organization *over* the two-caste system, developing into four caste-classes by 800 BC. (3) Clearing and settlement of the heavily forested Gangetic alluvial basin with Śūdra labour, mostly under Magadhan state enterprise (from 500 BC) ending in the first empire over the whole country by 250 BC. (4) A primitive feudalism whereby the peninsula was properly developed for trade and agriculture (say the Sātavāhana period), but with far less production in cities. The *emergence* of private property, even in land, began earlier than AD 400, before the prime of the Gupta empire. (5) 'Pure' feudalism, beginning in the later Gupta period but enormously stimulated by Muslim trade and military penetration after AD 1200. (6) Modern capitalism, culminating in the rule of a new indigenous bourgeoisie that came into being less than 100 years ago through European trade, factory production, and share capital, under British colonial rule.

2. *Was There an Asiatic Mode of Production?*

The quotation from Marx normally ends with the sentence 'In broad outline the Asiatic, ancient, feudal, and modern bourgeois modes of production can be designated as progressive epochs in the economic system of society'. This is quoted without change in Lenin's famous essay on Marx. J.V. Stalin, however, in his classic *Dialectical and Historical Materialism* says: 'Five main types of relations of production are known to history; primitive communal, slave, feudal, capitalist and socialist'. Why this difference? Clearly, the socialist form did not exist as a historical reality before Stalin. The primitive communal is the origin from which the *advances* have been mentioned by Marx; we have a careful analysis of primitive tribal society in Engels' *Origin of the Family*. What Marx calls the ancient stage is slave society, the modern bourgeois, the capitalist. So there is only one real change in Stalin's presentation, namely omission of the Asiatic mode. Whether deliberate or inadvertent, it seems to me neither correct nor trivial.

Marx never clearly defined the Asiatic form. He made prominent reference to the almost self-sufficing Indian village communes which could witness the ruin of empires with equanimity while concentrating upon some miserable patch of land. He also pointed out that the principal function of the central power in most Asiatic countries was regulation of the water supply; this can be proved for Mesopotamia, Uzbekistan, the Punjab, most of the Gangetic plain, and even the Mysore plateau. But surely these cannot suffice to characterize the Asiatic mode. Asia has two vital sources of civilization from which all its countries have drawn their inspiration: China and India. In ancient times, the Chinese deliberately borrowed a religion from India, which was for centuries a sacred land and is venerated even today in China. It is therefore reasonable to inquire what it was about India that was characteristic, to ask ourselves wherein the history of India *differs* from that of other countries.

Now it is clear that a characteristically Indian form of society did spread over the entire subcontinent (as the Egyptian, Sumerian, Greek did not over their own) in spite of its tremendous geographical, climatic, racial variety. It follows that the form was viable, and adaptable to changing conditions. How is it to be characterized? Certainly by the strong grip of religion—without an organized church as in Medieval Europe. Further, *India never had a slave-holding economy* in the same sense as Greece and Rome, so that one of the stages may be taken as missing here. On the other hand, India has a unique social division, the (endogamous) caste system. *Caste is class at a primitive level of production, a religious method of forming social consciousness in such a manner that the primary producer is deprived of his surplus with the minimum coercion.* This is done with the adoption of local usages into religion and ritual, being thus the *negation* of history by giving fictitious sanction 'from times immemorial' to any new development, the actual change being denied altogether. To this extent and at a low level of commodity production, it is clear that *an Asiatic mode did exist*, reaching over several stages; at least, the term is applicable to India, whatever the case elsewhere.

Two objections are sure to be raised. First, that religion is part of the superstructure, not basis; second, that all pre-bourgeois societies as well as the rising European bourgeoisie made full use of religion. The answer is that the superstructure reacts upon its basis—or there would be no fetters to burst. What is *socially* necessary depends in part on the social consciousness of the people concerned, which cannot be unaffected by strong religious belief touching everyday life. This means a restriction of freedom (the recognition of necessity), and often of the production of value (measured by socially necessary labour time). In comparing the relative strength of superstition in different societies, we must remember that change of quantity beyond a critical measure means change of quality. During the periodic Indian famines before 1900, it was repeatedly observed that large numbers of the starving multitudes not only refused to touch meat, but would not even partake of the nourishment served to them (by relief officials) without first making certain that food and water had not been defiled by the touch of some person of lower caste. This, though the alternative was death, and though caste had for centuries received no legal support. In spite of state backing, Graeco-Roman cults and the Christian church had had no such deadly effect on the common man.

3. *Ancient India*

Of the primitive tribal stage, we note here only the essential feature, that *tribal forms co-existed in varying concentration right* through the course of Ancient Indian history, remnants to this day enabling us to study our own past. An important function of a detailed history would be to point out how, at various times, these tribal forms were *assimilated* to society in general.

The oldest progressive stage of which we have any evidence is the Indus valley culture. This has left impressive urban ruins resembling the Sumerian, without decipherable records, so that we have to deduce the social conditions. Clearly, a surplus was produced to feed the urban population. There is no evidence for heavy ploughs, the chief metal (bronze) being too precious for plough-shares; but pictograms represent what seems to be a toothed harrow. Later references in the *Ṛgveda* indicate that the land was flooded by dams thrown *across* the smaller streams, which irrigated as well as fertilized the alluvial soil. The river was the main trade route. Trade formed an important part of city life; Mesopotamian imports are found in the Indus cities, Indus seals and products in Mesopotamia. There was, in fact, a stratum common to the Indus and Sumerian cultures. This trade led to considerable amassing of wealth by a few people, not overall development, as there are only two large cities 400 miles apart, Mohenjo-Daro and Harappa, other settlements being few and small, scattered from the Rann of Cutch to Simla and Bikaner, hence spread much thinner than in Sumer or Babylon. The wealth is attested by precious objects still found in the ruins, accurate small weights, and by the massive walls of the houses which present a blank front without even a decorated entrance. There seem to be no large public monuments worth the mention. Neither great palace nor great temple dominates the city. A large ritual swimming pool frequented (again reasoning from later sources) by hierodules or living representatives of the Mother-goddess, and terracotta figurines found in profusion should demonstrate great power of mother-right. However, the traders' seals show exclusively male animals and a three-faced god (so familiar as Śiva) so that the traders were men, with their own form of property, the *paṇis* of the *Ṛgveda* as against the general country population, the *dāsa* or *dasyu*.

The most interesting question would be the class-structure of the Indus valley culture under which the surplus was produced. No city is known that developed without a class structure, yet we have no details here. There is some evidence for temple (or municipal) slavery in the mean 'coolie barracks' behind a large granary at Harappa. But the mechanism of violence was trifling when compared to similar wealthy cities elsewhere. Sturdy axes, knives, etc. of bronze are tools rather than weapons; there were no swords at all. Arrow-heads seem to be of stone, the bow principally for hunting. No graves contain weapons. The spearheads found are of copper, thin and flimsy. The implication is that religion was already a substitute for pure force in maintaining the class structure. This is supported by the fact that, at the later stage, the cities show evidence of having been repeatedly sacked, the dead lying where they fell in the middle of the street or on a stairway. With force, the culture would have been able to spread beyond the Indus valley. Its stagnant nature is further revealed by the virtual absence of change over a thousand years. The river and the desert were both of fundamental importance (as in the Nile valley and Mesopotamia), for then agriculture was possible and necessary. There were no heavy forests to clear (as on the Amazon). A little irrigation would render the alluvial soil most fertile, while the desert gave protection for a long time against marauders.

It is fairly clear that the *Ṛgveda* Aryans killed this Indus culture about 1500 BC. Harappa shows a cemetery that can be called Aryan, and distinct traces of a total layer occupied by a new type of society; the city is mentioned in the *Ṛgveda* as Hariyūpīyā. The *Aryans were not a race*, their distinctive features being a new type of language and a pastoral-nomadic patriarchal life in tribal units, both of which were imposed by fighting upon different types of people. Not only direct conquest but the mere reaction to contact with Aryans sufficed to kill the older culture as well as to change the primitive forest tribes that also existed in India. This Aryanization continued in all marginal areas almost to the present day. The Indic Aryans did not survive as rulers superposed upon the older culture, unlike their fellows in Mesopotamia, Asia Minor, and perhaps Egypt. This means that Indus surplus production was less than in the west and quickly ruined. It necessarily meant the recombination of pre-Aryans and invaders into new tribes which took on the Aryan structure and language, fighting among themselves for cattle and water. Aryan military superiority depended upon their use of the horse, a mobile food supply in cattle, and knowledge of iron. But they destroyed the river dams that flooded the land (as the *Ṛgveda* testifies repeatedly) which broke the productive basis of the older civilization. It was inevitable that Aryanized Punjab should reach a state of turmoil as soon as tribal territories on the river banks began to overlap.

For this neo-tribal economy, land is territory, not property. Cattle have a common tribal brand, hence are held in common. The king is warleader, president at the ritual sacrifice, symbol of tribal unity himself bearing the name of the tribe, apportioner of surplus within the tribe, and often elected to office. The only private property is in tools and weapons, though the rare trader has begun to form his own accumulations of precious metals.

These new tribes are *not primitive*, as they carried the rudiments at least of a class structure. They held (in varying numbers) the Śūdras, tribal helots whose surplus was property of the tribe as a whole. This is not chattel slavery as at Rome, being nearer to the Spartan model. These lowly human producers have not the right of initiation into the tribe, no claim upon tribal property (being themselves tribal property), nor a claim to their own surplus product. They must have been acquired in some way from the Indus valley civilization, perhaps as a result of the conquest. The tribes also have a new type of priesthood barely mentioned as a separate caste in the *Ṛgveda*: the Brahmins, who recognized some sort of kinship and clan organization often transcending tribal limits. They too developed by influence and admixture of the older Indus priesthood with that of the Aryans. However, the real castes are two, *ārya* and *śūdra*, the main class division without intermarriage that was essential for later development of the Asiatic form. Agriculture begins again, depending in density upon the small canals that were already in use.

We know that these tribes continued to exist in western Punjab till the time of Alexander (330 BC). Taxila was a non-tribal trade city which submitted without a blow. Pauravas was head of the ancient Pūru tribe which seems to have aggrandized itself, and to have developed some sort of a standing army; he was defeated, to become a satrap of Alexander. The remaining tribes are smaller, the army consisting of all able-bodied tribesmen (not Śūdras), the tribal city being merely a small fortified headquarters for common defence in times of peril. Most of them fought desperately against the Macedonians, and were wiped out.

It follows from the foregoing class division that class differentiation among the conquerors could not long be delayed. This is precisely reflected in the difference between the *Ṛgveda* and the two *Yajurvedas*. These last deal with settlement further to the east, say East Punjab and Delhi, not later than 800 BC. We now approach the heavily forested areas, the Gangetic alluvial plain being as fertile as the Punjab, but with a greater rainfall. This forest could not be cleared by neolithic tools; neither stone nor metals are to be found in the river valley. The *Yajurveda* already speaks of the *vaiśya*, who is an Aryan (even *the* Aryan according to our lexica) but whose name means 'the settler'. The *kṣatriya* restricts himself to fighting, the *brāhmaṇa* to the priesthood. The Aryan *vaiśya* and non-Aryan *śūdra* are to produce the surplus, and are to be preyed upon by the *kṣatriya* nobles with theological support from the Brahmin—as is stated in so many words. This is the four *varṇa* system as against the two (*ārya*, *dāsa* = *śūdra*) of the *Ṛgveda*. Kings are more prominent, their sacrifices for success in war far heavier than before, sacrificial offerings now becoming the first regular tax; yet they are petty chiefs in territory. The *Ṛgvedic* king received voluntary sacrificial contributions from the tribe, not tribute exacted by force from the *vaiśya*. This implies a new form of property, obtained from settlement of the land, with a greater surplus by cultivation than was available in the earlier cattle-breeding economy, which still largely coexisted.

4. *From Tribe to Society*

By 700 BC, the Aryan course of advance had followed the Himalayan foothills to the frontiers of Nepal, thence down to the Ganges and across the river to modern Rajgir, also in the foothills. The main fertile river basin was dotted very sparsely with settlements in the dense jungle, for the slash-and-burn cultivation of the foothills is not practicable in heavy jungle. The easiest transport, down the river, served very few settlements, most being connected with each other and Taxila to the distant north-west by a land trade route. The tribal names are quite new to any reader of the Vedas, showing that Aryanization assimilated new people. Primitive savage tribes existed in the forest, living mostly by hunting and generally with their 'Aryan' neighbours who follow pastoral and agrarian economies. These savages (i.e. the Koliyas) are being Aryanized in their turn. By 600 BC, the greater Aryan tribes had begun to decay, the Licchavis and Mallas turning into oligarchies not yet penetrated by Brahminism, but ruling over or exploiting many people not belonging to the tribe. Other tribal states had earlier developed into monarchies fighting for hegemony. Brahminism flourished in these principalities, for great ritual sacrifices were considered essential for victory in war. New Brahmin clans rise to prominence, such as the Kaśyapas, presumably because of their connection with refugees from the other Indus culture when the first Aryan wave engulfed it. But Gangetic Brahmins have to go to the north-west to learn Vedic fire ritual. Traders are more prominent than before; without them the settlements would be unable to survive, as metals and salt had to be imported over long distances.

To open up the forested Gangetic plain, two resources were necessary: cheap metals and plentiful human labour power not subject to tribal rules and free of tribal protection. India's greatest resources of copper and iron are to the south-east of Rajgir, which thus controlled all metal. The capital city being close to the river, it was inevitable that its country, Magadha (originally a tribe) should ultimately rise to dominion. The march is steady from 500 BC onwards. Conquest of other Aryan tribes by fighting does little but add a liability in the absence of slavery; settling Śūdras in new territory means real wealth and revenue, provided the Śūdra himself gains enough thereby to breed in large numbers. State enterprise, as the logical extension of tribal activities, begins at this time to exceed all corporate or tribal activities, or private enterprise of any sort. Thus new settlements grow without disturbing the old tribal *janapadas* by heavy taxes, which are imposed on new settlements only. However, the recognized old tribal territory is doomed to suffer a corresponding change, for the tribes also possess Śūdras, hence are breaking up by sharing in the new property and its surplus produce. Some tribesmen have taken service with kings of neighbouring post-tribal states, thus enabling the latter to build up standing armies independently of the king's own tribe. Others are themselves penetrating the wilderness as settlers, which accelerates Aryanization of the forest savages, generally enrolled into the Śūdra caste, or becoming new 'Aryan' tribes by the help of imported Brahmins. The trend from tribe to a society in which tribal bonds and barriers were to be replaced by more general relations receives powerful ideological support by the development of new non-violent (*ahiṃsā*) religions. Buddhism and Jainism started at this time within a short distance and a few years of each other, the founders being themselves members of un-Brahminized Aryan tribes. They are the best developed of the many similar religions or sects that arose in the same religion during the sixth century BC, showing how necessary the religious superstructure had become. These religions preach against ritual sacrifice, from which Vedic Brahminism had made its heaviest profits; the denial of all killing suits the new agrarian economy. Thereto, the older tribal totemic ideas were fully utilized, being organized into a theory of transmigration, now for the first time on a *social* basis. That is, a tremendous social advance is made by the theory that man's good deeds will determine the human, animal, or insect body his soul will inhabit upon rebirth; freedom from the cycle of rebirth is to be gained by human perfection in social activity of the individual. These religions equate all tribes, indeed all living creatures, so act against the constant petty warfare for its own sake which prevented the growth of tribal society beyond individual tribal limitations. The *karma* doctrine, not to speak of its pacificatory effect, pleases the trader as a superhuman credit account; the almsman is cheaper to maintain than the priest, charging no fee, damaging neither trade nor agriculture by *yajña* sacrifice.

The remarkable development of Magadha is to be seen in the *Arthaśāstra*, supported in essentials by the account of Megasthenes. The main preoccupation of the state was control and development of non-tribal lands, the vast *sītā* domains far exceeding all previous settlements, which were carved out of the wilderness. The settlements were always of disarmed Śūdras. Monopoly of metals and mining as well as of most largescale trading kept the profits in the hands of the state. The caste system had so completely proved its worth that new tribes, guilds, professions (e.g. the *kāyastha* scribes) were simply enrolled as new castes, generally derived by a complicated theory that made them mixed offspring of the four main castes. The Magadhan state was particularly careful to destroy its most dangerous rivals, the Aryan tribes, by intrigue and direct military action. The Magadhan emperor replaced the tribal king, demanding personal loyalty from the survivors, who became part of the general ruling class; all fighters were enrolled into the army, but no tribal armies, no tribal allegiances or restrictions remained; tribal territory was delimited and taxed according to the lighter *rāṣṭra* scale.

Magadhan conquest had spread to its logical frontiers by the time of

Aśoka, overrunning not only the Punjab and Afghanistan but most of the peninsula as well. In the South, as for example Brahmagiri in Mysore state, there is no intermediate stage between the megalithic and the Mauryan. *Most of the newly conquered territory outside the Indus and Gangetic basins was unsuitable for profitable exploitation as sītā cultivation under state management*, which could only pay in very fertile virgin territory. The maintenance of a huge bureaucracy and large standing army at the centre, all paid in cash according to the *Arthaśāstra* schedule, became impossible because of difficult communications and official peculation. Some other method than naked force had to be found by 250 BC to keep the empire together. This was the new religion, Buddhism. The change in productive basis is quite obvious. With lack of cheap slave labour (the very few chattel slaves are precious house-slaves), enormous distances, poor transport, and severe restrictions upon trade, handicraft production in the cities could not grow, nor the cities themselves. Urban commodity production could not therefore supply the needs of the rapidly growing countryside. The mine shafts in Singhbhum and Dhalbhum districts had reached water level which meant—in the absence of pumps—that the Magadhan state monopoly in metals would be difficult to maintain, as was the centralized bureaucratic apparatus even with two subsidiary capitals at Ujjain and Taxila to help the cumbersome Patna administration.

The surplus food produced in state-owned *sītā* lands was distributed for sale principally through state granaries. But there was also competition by expansion of tribal *janapadas* (whose tribal unity and force had been destroyed), *śreṇī* associations of free settlers, and occasionally private individuals or families, all of whom push their way into the wilderness, or pay rent to the state for undeveloped patches within the *sītā* area. The main source of labour, the Śūdra, is semi-free and has no property, so that villages would be deserted under oppressive exploitation; squeezing them was not possible till all the best lands had been cleared and occupied. The system had to collapse when old *janapada* and state lands merged into a general settlement of basically equivalent nature. A second tussle was simultaneously in progress between the state and the private trader, who was subject to almost penal legislation as a dangerous rival of state monopoly. The only encouragement he received from the *Arthaśāstra* state was when he added value to the commodity by transport, either between districts or from a foreign country. He had no voice at all in state management. Yet the medium of exchange would inevitably be concentrated into the traders' hands. The progressive debasement of

Mauryan punch-marked coins proves that the cash economy was heavily strained.

5. *The Beginnings of Feudalism*

It follows that the Mauryan administration would fall apart of its own weight when handicraft production moved into the countryside, the *village becoming virtually self-sufficient.* The village as unit of basic production and immediate consumption, along with the free but unpropertied Śūdra as the main source of expropriable labour, persist long after, giving India its fundamental appearance of unity and changelessness till modern times. By the time of the *Manusmṛti* (between 200 BC–AD 200) the great central state had vanished along with its basis, the *sītā* land. All land is taxed more or less uniformly, but more lightly than before; the king, though absolute in theory, is a mere princeling. Cash payments by the state have dwindled to nothing, the two great central armies of bureaucrats and soldiers have disappeared. State officials are paid in perquisites and a share of the revenue, while the army is dispersed in local garrison (*gulma*) which the Mauryan state did not need. A further symptom of feudalism is that taxes for the labourer and artisan are not in cash but in the form of so many days' labour for the state—the corvee. The trader still has no voice in state management, but receives far more consideration than before, among with the right to internal trade. Local and guild custom is observed in administration of justice, though the brahmin claims to rise above all laws but his own, religion being a very important adjunct of the state. Yet the *Manusmṛti* has no delusions about the real function of caste or of the state: the king's duty is to keep the Vaiśya and the Śūdra compulsorily tied to their work of production, thus preserving the very foundations of society.

It should be noted that *the density of commodity production i.e., commodity production per head, had greatly decreased* in spite of increased population and more use values produced. The village artisan had his share of the land; his relation to the ultimate consumer was direct, being local. The king is only nominally the owner of all land, which was settled in village communes for the main food-producing portion. However, there are also private holdings in land while cattle are not communally owned, the unit of ownership for both being the large patriarchal upper-caste family household into which the ancient clan-*gotra* had been fragmented by the development of new forms of property. In fact, even the large household is doomed to gradual extinction by the rise of individually earned property, the *riktha* of the *smṛtis* which thus show conflicting views on inheritance. The family holdings, though assigned by the commune in theory, had become hereditary and furnished the real source of future change. Originally useful for corrals, kitchen-gardens and the like, they expand further into wastelands (as we know from southern records) for production of specialized trade crops such as cotton, cocoanuts, sugarcane; correspondingly, we get trade in greater volume (but not density) over considerable distances in metal, cloth, sugar, food oils. The profit is still insufficient for expropriation of the commune particularly as sale of foodstuffs is considered shocking. But the commune is completely disarmed, the country garrisons being responsible to the king alone. Thus royal officials tend to tyrannize, to collect more than a just share of revenue, and have a method of driving off communal holders from the best land, should it become necessary.

The Aśokan empire did not uniformize India. The south was still undeveloped; its development throws up new dynasties like the Sātavāhanas who continue the process of integrating tribal groups into general Indian society. Here the traders, Jain missionaries, and new post-Buddhist non-killing Brahmins play a shifting but most important role. Brahmins are regularly imported from the north by southern kings, to act as settlers and priests. This gives the necessary impressive ritual sanction to the king who wishes to rise over his previous tribal fetters. However, the Vedic sacrifices become extremely rare. The settlers bring new types of agriculture to the peninsula, agreeing in most cases to share the product with the primitive population that supplied the labour, and trading in the surplus. These new communities require virtually no force except against wild beasts. In many cases, the new pioneer Brahmins scandalize the older priesthood, as did formerly the more progressive and adaptable Brahmins of Magadha, by turning into priests for the various traders' and artisans' profit-sharing associations, many of which now count as castes or subcastes, having themselves developed in many cases from tribal fragments that participated in the new development of social production. These priests form depositories of law, sanction for agreements and contracts, medicine men possessed of the ritual considered necessary for success in any primitive enterprise. During this intercourse, a reciprocal influence works upon Brahminism, introducing all sorts of primitive ritual, not sanctioned by the older scriptures,[1] into current practice. Some of these ritual adjustments may be traced back to the stone age, but not through Aryan sources. In particular, concessions to mother-right appear comparatively late in Brahminism though the completely patriarchal

Vedas possess absolute sanctity and authority—in theory. We find a curious equilibrium between Aryan patriarchy and pre-Aryan matriarchy in Malabar.

The Gupta period (fourth-sixth century AD) sees the imperial conquest of many such petty kingdoms, where the Mauryan advance had been over undeveloped territory, or tribal regions. While the Mauryans had once been a tribe, the Guptas had no tribal basis, finding it necessary to boast of a marriage alliance with the Licchavis; that their capital became Ujjain shows the importance of the South and of trade. Should a tribe rise to power hereafter (e.g. the Maukharis), its king becomes paramount sovereign, his leading fellow tribesmen turning into great feudal officials and nobles. If conquered, the king, princeling, or chief himself became a feudatory under the victor. This period gives us the finest literary Sanskrit; as contrasted to Latin, medieval and classical Sanskrit are one. On the other hand, classical Sanskrit was far from the people's language; servants, women, and common people in Sanskrit dramas speak Prakrit, the cultured tongue being mastered only by priest, king and nobleman. The Buddha, insisting upon the people's language, preached in Pali which was also used in the Aśoka edicts meant to reach as many people as possible. From the Gupta period onwards, the deadly influence of brahmanism made Sanskrit the main language of inscriptions, a symbol of the ruling classes intimately connected with the priesthood that supported their rule. Persian and English hold a similar position in later periods, without the priesthood or deep cultural ties with the Indian people.

Again, the function of Brahminism and caste was to minimize the need for coercion. This could only be done, at the stage of social development, through ritual and priestly fiction; that means a low level of commodity production, shirking of reality.

6. *Later Feudalism*

The basis of fully developed feudalism was not the Muslim conquest but a considerable change in property relations which had begun long before and continued afterwards. The Muslims were a great *stimulus* as traders on the international market; they completed the decay of the older priest-ridden feudalism, turning a good deal of the accumulated loot into barter pseudo-capital. The first direct step in breaking up the old village economy was a heavy increase in taxes. Furthermore, some landowner—by no means always a Muslim—was made responsible for tax collection (generally in kind, but converted by the agent into money for the share to be paid to higher authority) in his own locality, being given military powers. He had the right and obligation of maintaining a certain agreed number of armed retainers at his own expense. This local feudal agent (*desai* in Goa with equivalents under other names elsewhere) and his men might be called to the wars by the superior feudal *sardār*; but he, the new petty commander, could and did tyrannize over unarmed landowners and the neighbouring communes. Thus most of the land was transformed rapidly into feudal property of landlords responsible only to a higher feudal lord, not to the communes nor to fellow landowners in the former undivided patriarchal family household. This was *feudalism from below* as against the earlier feudalism from above. Production and exchange were also transformed by this concentration of surplus, the feudal owner being a necessary complement to the trader. There came into existence a home market, small but valuable in the aggregate; on the other hand, there were few free landless workers, so the predominant exchange was still local barter. The commune survived only in partial form or in poorly settled localities away from main trade routes, or where Muslim conquest had been absent or transient.

This was an extension of previous internal development. The strife was expressed in theological terms from the earliest times, simply because of the peculiarly Asiatic mode of production. The internal dissension manifests itself as early as Kaṇiṣka in the wealthier northern Mahāyāna as against the more primitive Buddhism of the less developed south. Then we have the rise of Śaivism against Buddhism; both religions continued to be professed simultaneously by the noble families, yet at the time of Harṣa (first half of the seventh century), there was a notable conflict between eastern and western regions. The next controversy was between the Vaiṣṇavas and the *smārta* worshippers of Śiva, which lasted well into the Islamic period, even in territories conquered by Muslims. Here we knew from extant tradition that the real quarrel was between the greater officials or landowners and the lesser private owners. On the other hand, the complete feudal system once set up spread rapidly into territory not conquered by Muslims, which again demonstrates that society was ripe for it. Though its whole theological superstructure had been proved hollow, brahminism and caste survived under the Muslims, with facile adaptation to the new situation wherein the vast majority of the previous workers continued to have their surplus expropriated by a new class of landowners. The Śūdra could be a member of the owner class, for people of no caste at all were at the top; yet for most, there was little effective change, comparatively few people availing themselves voluntarily of the chance of escape from the caste system because there was not much chance of escape from the economic class. The centralization attempted by Alāuddīn Khiljī in direct exploitation of crown lands with imperial slaves (the *bandagan-i-khās*) failed dismally, as did Mohammed Tughlaq's currency control. Neither a slave economy nor reversion to the *Arthaśāstra* were possible. The feudal nobility and theologians (*ulemā*) opposed these attempts bitterly and successfully. Thus we have Asiatic feudalism, the central state being rather weak (in spite of the supposedly absolute power of the emperors) except in regulating matters between or to the class benefit of feudal lords.

I have adopted a certain method of historical analysis *only because it works*. We have not the dates and episodes which fill out European history. No chronicles, family records, church annals are to be found—a symptom of local rustic production, the idiocy of village life as lived from year to year, absence of the trader's influence. We have therefore to abandon the scissors-and-paste method. Our history has to be written without solid documentation of episodes, in large outline. At the same time treating history as a science, regarding it not as successive waves of emergency or acts of god but the combined effect of human effort enables one to realize that the future is not a blank, that a correct analysis of present factors tells us what is to come, and may enable us to *make* history. After all, the real history of man can only begin with a universal classless society.

ENDNOTES

1. Examples: (1) The almost country-wide democratic *Satyanārāyaṇa* observance seems to have originated after AD 1800 from the popularity of a legendary Muslim Satya Pīr. (2) The coconut that plays a crucial part in every Hindu religious ceremony was hardly known before AD 400, being of Malayan origin; its general availability before AD 1000 is highly unlikely. (3) The stone age saddle quern is used to this day even in kitchens (like mine) where the cooking is done on electric and kerosene ranges. With it goes a stone-age rite found all over the peninsula, in almost all castes. Before a new-born child is named, the roller stone of the quern, dressed up either as the child or a goddess, is passed around the cradle and then deposited in the cradle, to ensure longevity for the infant. *This ceremony is performed and attended only by women*, so that most of us remain unaware of having received such prophylaxis!

BIBLIOGRAPHICAL NOTE

For studies of the ancient period, see my papers in the *J. Bom. Branch Royal Asiatic Society*, from the year 1946 onwards; for survivals of the village commune in Goa, the *J. Bom. University*, 1947, vol. XV, pt 4, pp. 63–78. A criticism of Suleikin's periodization of Indian history was given in the *Annals* of the Bhandarkar O.R. Institute, vol. 31, 1951, pp. 258–66 [reprinted in this collection]; of Dange's unjustifiable guesswork in the guise of ancient Indian history, ibid., vol. 29, 1949, pp. 271–7 [reprinted in this collection]. The clan organisation reflected in the brahmin *gotra* system is further studied in a paper to appear in the *Festschrift Gode*. The foreign bourgeoisie brought science and historiography to India. But whereas science can be put to direct use and the pragmatic test, history reflects the class interests of the writer unless he works consciously on a definite theory. Some Indians are converting the older theological view of history into a mystagoguism matching that of Toynbee; it will not take long to produce Indian Spenglers and Sombarts should the political situation demand it—as is likely.

SECTION II
Themes in History

5

The Vedic 'Five Tribes'*

1. The *Ṛgveda* refers several times[1] to the 'Five Tribes' (as *janāḥ* in *RV.* 3.37.9; 3.59.8; 7.11.4; 8.32.22; 9.65.23; 9.92.3; 10.45.6; 10.53.4–5 and *jātāḥ* in 6.61.12). The 'Five Humans' (*mānuṣāḥ*) occur in *RV.* 8.9.2, 'Five Nations' (*kṛṣtayaḥ*) in *RV.* 3.2.10; 3.53.16 and 'Five Mobile Peoples' (*carṣaṇyaḥ*) are cited in *RV.* 5.86.2; 7.15.2; 9.10.9. The last two designations may be traced to the same root *kṛṣ*, to haul or drag, which is closely associated with ploughing in later Sanskrit. The Five are nowhere explicitly named in any early source. However, a set of five tribal names occurs in just one place, *RV.* 1.108.8: Yadu, Turvaśa, Anu, Druhyu, Pūru. Each of these is mentioned separately in other *Ṛgvedic* hymns. The first four come together again in *RV.* 8.10.5, which led to the conjecture that the seer belonged to the fifth, the Pūrus. Turvaśa is generally found with Yadu; Anu and Druhyu are comparatively rare. The Pūrus are perhaps the most favoured single *Ṛgvedic* people though occasionally cursed by a hostile seer like Vasiṣṭha in the famous Ten-Kings hymns *RV.* 7.18. In that *sūkta*, all Five are among the many enemies over whom King Sudās prevailed, except the Yadus who might perhaps be concealed under the title Yakṣu (which seems an unlikely conjecture to me).

Western scholars from Roth onwards[2] generally agree that the various citations *jana, jāta, mānuṣa, carṣaṇī, kṛṣti* should be equated in this particular context. The Five are then taken precisely as Yadu, Turvaśa, Anu, Druhyu, Pūru. No other pentad anywhere else in the Vedas can possibly refer to human groups. This quite reasonable identification is flatly contradicted by the interpretations which Indian commentators have given from the earliest times.

Sāyaṇa in his *bhāṣya* to the *Ṛgveda* takes the Five to mean the four class-castes (*varṇa*) with the autochthonous savages (*niṣāda*) as the

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fifth. This amounts to all Indian humanity and even all mankind in a Brahmin's reckoning. The particular interpretation seems to have originated with Aupamanyava, according to Yāska's *Nirukta* 3.8. On *Ṛgveda* 9.66.20, however, Sāyaṇa offers two other alternatives besides his favorite equivalence. The Five are either the Gandharvas, Fathers (*pitaraḥ*), Gods (*devāḥ*), Asuras and demons (*rakṣāṃsi*); or Gods and Men, Gandharvas and Apsarasas, Snakes, Fathers. The latter classification could presumably be reduced to five categories by taking Gandharva and Apsaras as the male and female of a single species; neither Sāyaṇa nor his source (*Aitareya Brāhmaṇa* 3.31) bothers about such arithmetic trifles. The *Śatapatha Brāhmaṇa* mentions the Five in 13.5.4.14 without details or ethnic implications, as does the *Aitareya* in 8.23. Sāyaṇa preserves the ambiguity when commenting upon *RV*. 6.51.11; 6.61.12. On *RV*. 1.176.3, he interprets the Five as the four castes plus *niṣādas*, with yet another alternative: Gods, Men, Fathers, Beasts and Birds. Yet the comment on *RV*. 10.45.6 states unequivocally: *pañca janāḥ = mānuṣāḥ* as on 7.15.2: *pañca carṣaṇiḥ = pañcajanān, manuṣyān*. Only a veteran Indian *paṇḍita*, serenely conscious of his mastery of the sacred books, could contradict himself so often with such perfect aplomb.

Sāyaṇa and the Indian traditionalists nowhere give the Five as specific tribes, let alone the particular Five enumerated above. Even on *RV*. 1.108.8, each of the Five Tribes named is equated in the comment to a separate type or character of human being, but not taken as the proper noun designating an ethnic group which had actually borne that name.

2. The Indian and Western views are not so completely irreconcilable as they appear at first sight. It has already been noted in passing that Sāyaṇa's main interpretation makes the Five virtually synonymous with all mankind. The alternatives he derived from older commentators seem equivalent to 'all moving creation' in the context. Modern scholars have also remarked that *pañca janāḥ* is in fact used with some such universal connotation by many of the original seers. Indra is 'of the Five tribes' (*pāñcajanya*: *RV*. 5.32.11; 9.66.20 &c), though the Boghaz-Köi texts show that even Aryans whose tribal names do not appear in the Vedas also worshipped Indra. Similarly, *mānava, mānuṣa* literally mean 'descendant of Manu', an Aryan progenitor; the meaning was later extended to cover all humanity, though not all creatures. For the last, the Brahmins had to discover Kāśyapa as father of all creation (*prajāpati*) with the indispensable cooperation of Aditi and other goddesses.

Geldner's note on *RV*. 9.101.9 brings out the modern critical view fairly well:[3] 'Die fünf Völker umspannen den geographischen Horizont des

Dichters, vgl. 7.15.2. Für *pañca* steht allgemein *viśvāḥ* 1.86.5; 4.7.4; 5.23.1.' The point may be argued, for people in the primitive tribal stage do not think of men and women outside the tribe as really human. Shifting the seer's mental horizon from the geographical to the ethnic world and allowing for the gradual changes of viewpoint would be better. As Zimmer (loc. cit., p. 125)* put it: 'Solche Redeweisen werden leicht formelhaft, werden beibehalten aus Ehrfurcht gegen das Hergebrachte, auch wenn die Verhältnisse nicht mehr stimmen . . . So kann wirklich in jüngeren Liedern in den Ausdruck öfters eine Bezeichnung der Menschen uberhaupt liegen; dies beweist jedoch nichts für den ursprünglichen Sinn desselben'.

If one could stop here, the whole discussion reduces to a triviality. The real difficulty lies in explaining the historical process of change, of the loss of specific tribal meaning when the Five are actually named in a *Ṛgvedic* hymn. For Sāyaṇa, this difficulty did not exist, for the simple reason that history meant nothing to him. The *Ṛgveda* was eternal and immutable, though his own glosses show how far the course of historical change had brought him from the original meaning. Not only had the Five Tribes vanished long before Sāyaṇa but the initial significance of the Veda had passed away just as completely. The learned pundits assembled to help Sāyaṇa with his great task might recite the Soma book (*RV.* 9) in its entirety from memory without error in so much as a single tone accent; none of them even knew what the original *soma* plant was. Any suggestion that they sacrifice cattle publicly in honour of Agni or Indra would have caused the utmost consternation and appeared sacrilegious. Blood sacrifices did continue among far lower strata of the population, as they do to this day—without benefit of Brahminism, or of the Veda. The Vedic scholars were themselves steeped to the marrow in Upaniṣad-Vedanta philosophy and worshipped gods not known to the Vedas.

3. The mechanism of historical change suggested by modern scholars in the case of the Five not only creaks but falls apart when one tries to make it work. Ludwig (loc. cit., p. 125) could not decide how the Kurus came to rule instead of the Pūrus, or even whether the two were the same with a trifling change of name. Macdonell and Keith (2.12) quote this with approval as supported by Oldenberg's conjecture: that the 'sudden disappearance' of the Pūrus is accounted for by their having 'become part of the great Kuru people, just as Turvaśa and Krivi disappear from their being merged into the Pañcāla nation.'

There is still wilder suggestion that the Five turned into the Pañcālas.

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*See fn. 2.

Yet the historical climax of the Pūrus is not in doubt. They put into the field the largest single Indian army to oppose Alexander. The king's name was Πῶρος, also the name of a rebellious nephew who headed a fraction of the tribe. Throughout the *Ṛgveda*, the tribal chief is mentioned by the tribal name, much in the manner of Scottish clan-chiefs, when referred to by persons not members of his clan. It follows that the Pūrus were still the greatest single 'nation' of the west Punjab, had changed neither their name nor their location and surely not merged into the 'great Kuru people,' at least till 327–6 BC. The battle against Alexander wiped out the flower of their manhood, but the defeated king Poros was given a satrapy in the Punjab by the conqueror. About five years later came the irresistible flood from the east. An immense Magadhan army under Candragupta Maurya swept over the Punjab, across the Indus and deep into Afghanistan. The conquered regions were held by the Mauryans for over a century, after which a succession of Greek, Śaka, Kuṣāṇa and other invaders pushed in again from the west. There is no reason to believe that all Pūrus were killed off, but clearly the double military catastrophe between the years 327 and 317 BC (approximately) finished them as a tribe, nationa, or politically important group.

Far from having absorbed the Pūrus, the 'great Kuru people' were off the scene before Alexander. Their supposed greatness, due presumably to the impressive bulk of the *Mahābhārata* and to nothing else, had vanished still earlier. While the epic treats the Kurus and their Pāṇḍu cousins as world-conquerors with a concept of universal monarchy which could not have jelled before Candragupta Maurya, the very theme of the work is the civil war which ended in total extermination of both sides. This war cannot be put after Alexander's invasion; nor do Greek accounts mention the Kurus. The epic itself tells us that a stillborn posthumous son of Abhimanyu was quickened into life by Kṛṣṇa's divine intervention. This was Parīkṣit, installed upon the throne of Taxila, not of Delhi, for no apparent reason. It is again obvious that Parīkṣit's line was extinct before Alexander's raid, for only a king Taxiles is mentioned without any other name as having welcomed and joined Alexander. The Upaniṣadic riddle: 'What became of the Parīkṣitas' (*Bṛhadāraṇyaka-Upaniṣad* 3.41) asked in the Madra region and the answer, that the Parīkṣitas went to the Elysian fields reserved for horse-sacrificers, both prove the extinction. The Taxilans of the fourth century BC belonged to the eastern division of the two Gandhāras, hence were not Kurus. A small Kuru tribal kingdom did exist in the Delhi-Meerut region down to the time of the Buddha, who uttered several discourses in Kuru and (*Dīgha-Nikāya* 15, 22 and *Majjhima-N.* 10, 75, 82, 106). It is difficult to imagine that it could have survived as late as 350 BC, because Mahāpadma Nanda of Magadha is credited with the destruction of the last truly Kṣatriya tribes.[4] All genealogies[5] of the *Mbh.-Purāṇa* complex make the Kurus a branch of the Pūrus or, what is the same thing, the eponymous ancestor Kuru a descendant of Pūru. No merger is ever mentioned in the records.

4. The *Mahābhārata* refers to the Pūrus even apart from the genealogies. A Paurava king was defeated by Arjuna on the north-west frontier (*Mbh.* 2.24.15). Comparison of the adjoining tribal names in this passage with the parallel list of people offering gifts to Yudhiṣṭhira at the *rājasūya* coronation sacrifice makes it likely that Pauraka in *Mbh.* 2.48.13 should be emended to Paurava. A Paurava comes in the traditional list of 'universal (*cakravartin*) emperors' as in *Mbh.* 1.61.28; and in *Mbh.* 2.8.8, 3.83.110, 3.92.17 and 12.160.73. No critical text is available for the thirteenth book, but Sörensen's index shows the name also in *Mbh.* 13.94.115 and 13.116.

Besides this fabulous and exemplary monarch, there is at least one other Paurava in the epic. He actually fought in the battle at Kurukṣetra, as a *mahārathi* on Duryodhana's side (*Mbh.* 5.14.4). Bhīṣma reckons him among the 'great chariots' of the Kaurava army in 5.164.19, which presumably makes him the commander of a Paurava contingent. Arjuna killed Damana, heir-apparent to Paurava in *Mbh.* 6.57.20. In *Mbh.* 6.112.15–26, Paurava was carried off the field of battle by Jayatsena, seriously wounded in a desperate duel with Dhṛṣṭaketu of Cedi. Nevertheless, he appeared once more against Arjuna's heroic son Abhimanyu in *Mbh.* 7.13.44–58. The fight went against him and he was rescued in dire straits by Jayadratha. With stamina remarkable even for a Bhāratan chariot-fighter, he was among those who rescued Duryodhana a little later in the same engagement (*Mbh.* 7.36.6). There is some defect in the source material here, for a hitherto unnamed Paurava suddenly appears on the other side, fighting in Pāṇḍava ranks. Aśvatthaman shoots five consecutive shafts at Arjuna, Bhīmasena, the Cedi prince, the Paurava Vṛddhakṣatra and Sudarśana of the Mālavas. The fourth prince had his arms and head struck off in *Mbh.* 7.171.64 by Aśvathaman's arrows. This was too much even for a Paurava, for his death is confirmed by 7.172.9. The last reference calls him the Paurava *yuvarāja*. *Mbh.* 8.4.35 reports that it was Arjuna who killed Paurava of the myriad elephant-corps. There is some doubt about the reading of the name here, and even more in 9.23.25 which has the Paurava Jalasaṃdha on the death-roll, though 9.21.33 calls him the Kaurava Jalasaṃdha. The bards were a bit careless, our critical editors not critical enough in this case at least.

These references to Pūru and Paurava are less relevant to our problem of the Five than the *Mahābhārata* story of Yayāti. King Yayāti had five sons: Yadu and Turvasu by a Brahmin wife, Devayānī; and Druhyu, Anu, Pūru (or Puru) by the clandestine kṣatriya wife Śarmiṣṭhā, who counted as Devayānī's hand-maid. When the fact of other sons by Śarmiṣṭhā was discovered, Yayāti was cursed to premature old age unless one of his sons would agree to exchange the father's senility for his own youth. The sons were asked in turn to sacrifice their youth, but the first four refused and were cursed by the irate father (*Mbh.* 1.79). The youngest, Pūru, agreed willingly and was named heir by the gratified monarch. The immediate moral of this story for the epic was that a junior could rightfully supersede his elder brothers to occupy the throne, whence it was not against law and tradition for the Pāṇḍavas to supersede the elder Kaurava branch. The *Ṛgveda* knows of a sacrificer Yayāti (*RV.* 1.31.17), son of Nahuṣa (*RV.* 10.63.1), but never relates him to any of The Five.

The same epic presents yet another version of the Yayāti story in the *Gālavacaritam* section (*Mbh.* 5.104–21). Here king Yayāti had only two sons, Yadu and Pūru, in addition to a daughter Mādhavī. This girl was sent out to three separate kings and to Viśvāmitra, in turn, for an agreed bride-price of 200 white horses (with one black ear) in the first three cases and as the equivalent for Viśvāmitra. The sons thus begotten belonged each to his own father. When Yayāti fell from heaven because of his pride, his quite earthly body tumbled precisely on the sacrificial ground where the four brothers had assembled for a *yajña*, along with Yadu, Pūru and Mādhavī herself. By an 'Act of Truth,' each gave a portion of his own merit to Yayāti, which raised him back to heaven. There is no mention of a curse or the succession here, nor of Anu, Druhyu, Turvaśa-Turvasu. However, the five sons of Yayāti reappear in *Mbh.* 5.147.3–13, though only the eldest Yadu and the youngest Pūru are named. Yadu was overbearing because of his prowess. The three brothers next in order supported him. Their disgusted father ostracised them from the kingdom. The verb form is (*rājyāc ca*) *vyaparopayat*, but it seems to me that the correct reading should have been *vyaparodhayat*, seeing the position of the *aparuddha* prince or oligarch (*rājanya*) in *Brāhmaṇa* literature and in the *Arthaśāstra*. In any case, Pūru succeeded to the kingdom; this is briefly confirmed without the rest of the story by *Mbh.*

12.29.90–1 and without mention of the other four brothers by *Mbh.* 12.160.73.

It remains for us to see if anything of value can be extracted from this decidedly mixed bag.

5. It has already been shown that very little emerges from the usual approach of philosophical guesswork followed by pure rationalization. Neither the relevant archaeological discoveries nor the verifiable records with which the results of properly conducted excavations must be collated exist; neither are likely to appear in the foreseeable future. To get any logically consistent result under these circumstances, it would be necessary to pay special attention to changes in the social background and to the peculiar mechanism of transmission. Between the redaction of the Vedas and that of the epic intervenes a complete metamorphosis. A predominantly pastoral, tribal society of bronze-age marauders settled down to agrarian peasant life made possible by the discovery and availability of iron. The iron age led also to a change in the centre of gravity because the Gangetic plain was first cleared for plough-farming only when cheap metals were found.

Taking these factors into account, one may reason as follows:

i. When we speak of the extinction of a tribe like the Pūrus, it surely does not mean that every member of the tribe died, but rather that the tribe vanished as an entity. The tribesmen dissolved into a wider peasantry. It is precisely where agriculture was most difficult that tribal cohesion remained necessary; only there could Vedic survivals be expected. The best known example is of the Pakthas of *RV.* 7.18.7, to be identified Πάχτνες of Herodotos (*Bk.* 3.102; 4.44; 7.67; 68, 85), the modern Pakhtoon or Pathans of Pakistan and Afghanistan. The Pūru army may have been wiped out altogether by Alexander and the Mauryans, but the greater number of Pūrus must have survived, it was the most numerous of the tribes then in the Punjab. Is it too fanciful to trace the modern Punjabi surname Pūrī to the Pūru tribe? There are other survivals of even greater age, e.g. the Hariyūpīyā of *RV.* 6.27.5, which must be modern Harappa. Hariana and the Malwa tract of the Punjab derive from Aryan and Malava tribal antiquity. The Johiyas are presumably descended from the Yaudheyas. Unfortunately, local tradition is not available in a province trampled underfoot throughout recorded history by so many invading armies; one must look elsewhere for data. However, it is clear that there is no need to find some other tribes into which the Pūrus or the remaining members of the Five merged.

ii. The tribes dissolved into a class society: society which could be divided into Brahmin, Kṣatriya, Vaiśya and Śūdra. Not every Aryan tribe had Brahmins within its fold in the Vedic stage, nor any strong class division except perhaps between the tribesmen proper and śūdra helots. Tribal legends, therefore, had to be transmitted after the dissolution through the literate fraction, the Brahmins. While the Brahmins left a clear mark upon Sanskrit literature, Vedic and later tribal life also left its reciprocal mark upon the Brahmins. One has only to consult any standard *gotra* list[6] to be convinced of this. Kutsa is a seer and tribal name in the *Ṛgveda*; *RV*. 7.25.5 implies that some Vasiṣṭhas were Kutsas. Today, they rank among the Kevala-Aṅgirasas, with Kautsa. The *Ṛgvedic* Pūrukutsa, who headed a combined tribe according to his name, reappears in the Viṣṇuvṛddha *Pravara*, though not a Brahmin in the *Ṛgveda*. It is obvious that the later rule, 'a kṣatriya has his priest's *gotra*,' has been inverted from the original situation, where the sacrificer and the warrior necessarily belonged to the same clan and might be brothers. Even some modern Brahmins have acquired surnames from the non-Brahmin families for whom they officiated, e.g. Āṃgre, Marāṭhe. The double Vaikarṇā tribe of *RV*. 7.8.11 is the only possible source for Vaikarṇa, Vaikarṇeya, Vaikarṇāyana, Vaikarṇi in the *gotra* list, albeit in several different groups. Not all such tribes appear in the *gotra* rolls now left, e.g. the Śigru of *RV*. 7.8.19 which left a *gotra* that appears in a Mathura inscription.[7] I have concentrated upon the Ten-Kings hymn because of one most striking name: Bhṛgu (*RV*. 7.18.6). Today, the Bhṛguids are known only as a major Brahmin clan-group. *RV*. 7.18 has therefore been interpreted to mean that one priest loyally followed his royal patron into battle—a suggestion too ridiculous to be considered. The Bhṛgus made an excellent chariot for Indra (*RV*. 4.16.20), while Bhārgava still retains the secondary meaning 'potter'. The second book of the *Ṛgveda* belongs to the Gṛtsamadas, later ascribed to the Jamadagni group of the Bhṛgus. Bhṛgu himself is not a *Ṛgvedic* seer at all, in spite of his later pre-eminence.

The pre-eminence was due to one special aptitude the Bhārgavas seem to have mastered before the rest of the Brahmins, except possibly the Kāśyapas. They absorbed and rewrote local tradition, assimilating it to ancient Vedic stories whenever possible. The extinction of the tribes and Brahmin monopoly of Vedic *sūktas* made this possible. The *Mahābhārata* inflation is peculiarly to the credit or the discredit of the Bhṛgus.[8] Naturally, they wrote themselves up as well. Bhṛgu becomes a special *vibhūti* of Kṛṣṇa in *Gītā* (*Mbh*. 6.32.25). The greatest of martial heroes—in Brahmin records—was their ancestor Paraśurāma, who annihilated all kṣatriyas no less than twenty-one times, overcompensating the only known Bhṛgu military experience: defeat in the Ten-Kings battle. The name Bhṛgu is related to Phrygian, but the tribe had no existence in post-Vedic India. This made it all the easier for such of them to climb fast as had joined the Brahmin fold and learned the trick of rewriting.

iii. It follows that we need not expect too much accuracy from what is left of Brahmin tradition, but also that the tradition is not entirely worthless. It is essential to remove what is specifically written into document to glorify the writer's clan, or to absorb a local story of interest to some offshoot of the clan. I may point in passing to the Matsyagandha *gotra* among the Bhṛgus and the Bhāratan story of Satyavatī-Matsyagandhā (*Mbh.* 1.57.36 ff), again connected through the heroine's brother with the Matsya tribe of *RV.* 7.18. The extra-ordinary tale of the demon Jālaṃdhara, apparently the tutelary *Yakṣa* of the Punjab district, could hardly have entered the Purāṇas[9] without some connection with the *gotra* Jālaṃdharī among the Kaśyapas.

For our special problem, there seems to be just one source left, namely the curse of Yayāti. It is quite obvious that the epic version was due to the natural desire to arrange antique lore into a linear sequence of great kings Nahuṣa-Yayāti-Pūru. The ascription of five sons with the *Ṛgvedic* Five tribal names to a single 'king' Yayāti was possible only because all the tribes concerned were far distant in time and place. This would account for the discrepancies noted earlier. The rewriting was done from many conflicting or divergent sources. Nor have we purely Aryan tradition, for the main purpose of the redaction was to assimilate Nāga and other un-Aryan stories as well. A relatively minor *Ṛgvedic* character like Ikṣvāku had become great in eastern genealogies, the Okkāka from whom Pasenadi of Kosala and the Śākyans both claimed descent according to Pali sources. Ikṣvāku is mentioned only once in the oldest Veda (*RV.* 10.60.4) and given lower status to the Marāyin who towered above him and above the Five Tribes. Marāyin disappears from sight after this single mention.

Yayāti cursed his obdurate sons as follows (*Mbh.* 1.79.7, 11–13, 19, 22–3). For Yadu: 'Thy descendants will never share in kingship.' The Yadus known to the writer's sources were clearly an anarchic tribe with quite limited power for the chief, as contrasted to the absolute monarchy which was all that kingship signified to the redactors. This is amply confirmed by purāṇic reports of the Yadus; even in the epic, the Yadus have no king. The next son Turvasu was told: 'Thy descendants will go to perdition. Thou shalt be king over people who do not observe caste rules, who marry against the caste order, follow beastly (totemic?) rites, lead sinful lives, lie with the wives of their betters and are un-Aryan barbarians.' The Turvaśas clearly dropped out of the main course of Brahminical development, as did other frontier people like the Madras and Bāhlīkas. The execration of Druhyu runs: 'Thou shalt go to a place with thy following, where the sole means of transport is by rafts; non-king, a mere chieftain (*bhoja*) by title.' My interpretation of *bhoja* can be supported by other references and arguments. The fourth son, Anu, was damned with: 'Thou and thy descendants shall die prematurely; no right shalt thou have to perform the correct fire-ritual.' These detailed and specific curses bear the mark of historical truth.

The answer to the original question is now simple. The four 'accursed sons' (of Yayāti) among the Five Tribes never reached inner differentiation into a class society, nor patronised Brahmin rites. They inhabited places well out of the way and soon ceased to be counted among the high Aryans when *Yajurvedic* ritual developed its monstrous sacrifices and was in turn superseded by the agricultural life. That the Five do not appear as individual tribes nor as an ethnic grouping in the *Yajurveda* and the *Brāhmaṇas* indicates that they left a faint impression on those who handed down the tradition. The eastward shift in territory after the *Ṛgveda* and the dominance of the Brahmin priesthood as a separate caste over the line of transmission cannot be contested. But the Yadus had to be revived in some way as they were Kṛṣṇa's people, though Greek accounts ignore the extinct Yadus to tell us that the Kṛṣṇa-Herakles cult was centred at Mathurā of the Śūrasenas. The later, fictitious Yādavas or Jādhavs, could safely be foisted upon a vanished tribe. The original Yadu demi-god or hero had stood out against cattle-sacrifice to Indra; his cult accordingly spread into a newly agrarian Punjab,[10] driving that of Indra to the hills before 327 BC. He had a definite popular following, so was promoted to be Arjuna's charioteer though his original saga never rose above the ox-cart. The Pūrus, and only the Pūrus among the Five Tribes, outlasted the others. Their memory was fresher because they had colonised extensively, a junior Kuru branch going as far as the Yamuna and Ganges rivers to the east. Only this Kuru branch, not the Pūrus proper, left a mark upon our current gotra list: the gentes Kauravya, Kauravyāyaṇa, Kaurukṣetri. However, the Pūrus had developed kingship, had patronised Brahmins and the sacrifice. Even though Alexander made no impression upon Indian tradition, some memory of one or more fighting Pūru kings necessarily survived. The 'Great Charioteer' Paurava had therefore to be made to join in the 'great war' which had originally been a small though desperate skirmish in Kuru-land. This seems to me to account for all the divergent features of the epic tradition, besides explaining what became of the Five Tribes.

NOTES

1. The general references will be found in A.A. Macdonell and A.B. Keith's *Vedic Index of Names and Subjects*; 2 vol. (London, 1912). The analysis by A. Ludwig in the third volume of *Der Ṛigveda* (Prag 1878) has also been of great use. For the *Mahābhārata*, the critical text, still incomplete, of the Poona edition (Bhandarkar O. R. Institute) has been used; in this, some of the references given in Sörensen's *Index* (London 1904) drop out of the main text.
2. A. Zimmer: *Altindisches Leben, die Kultur der Vedischen Arier nach den Saṃhita dargestellt* (Berlin, 1879) pp. 119–25 gives a comprehensive discussion.
3. K. F. Geldner: *Der Ṛigveda, aus dem Sanskrit ins Deutsch ubersetzt und mit ein laufenden Kommentar versehen* (Harvard Oriental Series, vols. 33–5; Cambridge, Mass, 1951), with an index and notes edited by J. Nobel, vol. 36 of the *HOS* (1957)..
4. F. E. Pargiter: *The Purāṇa Text of the Dynasties of The Kali Age*; (Oxford, 1913), pp. 23–5; 69. Mahāpadma could not have destroyed all the tribes mentioned in this passage. Buddhist and Purāṇa records agree that the Ikṣvākus proper in the main line ended with Sumitra of Mithilā, who died about the time of the Buddha's birth. The Maithilas and Kāśeyas had been absorbed by the Kosalans before that time and had no independent existence. However, the Kurus, the Pañcālas associated with them, and the Śūrasenas of Mathurā fit logically into the known timetable of Magadhan expansion. Pargiter's introductory note on p. 23 makes a poor guess: 'The Kurus (who are probably the Kauravas).' Pauravas of the principal line flourished till 327 BC in west Punjab. The Purāṇa writers were obviously easterners who knew something about the Kuru genealogy, with a bare outline of the tradition that the Kurus were an offshoot of the Pūru tribe. The Gandhāra, Madra, Śibi, western Cedi and other powerful tribal kingdoms of the frontier were known to the *Mahābhārata*, Buddhist records and some of Greek accounts. The Purāṇas, which mention people like the trifling Vītihotras, ignore even these really important western Aryans.
5. Ibid., pp. 4–8; 65–6; *Mbh.* 1.89, and another version in 1.90.
6. J. Brough: *The Early Brahmanical System of Gotra & Pravara* (*The Gotra-Pravaramañjarī of Puruṣottama*, translated); Cambridge University Press, 1953.
7. H. Lüders: List of Brahmi inscriptions from the earliest times to about AD 400 with the exception of those of Asoka;.*Epigraphia Indica*, Appendix to vol. 10; no. 82.
8. V.S. Sukthankar: *The Bhṛgus and the Bhārata: A Text-Historical Study*; Sukthankar Memorial Edition, vol. I, 278–337; reprinted from the *Annals of the Bhandarkar O.R. Institute*, vol. 18, pp. 1–76, being the *Epic Studies VI.*

9. *Padmapurāṇa* (*uttarakhaṇḍa*) 6.3–19 and again in 6.98–107, though no critical edition of the *purāṇa* is available, and the two versions even in a single section show considerable differences of detail. The legend or rather myth appears also in *Skanda-P.* 2.4.14–22, again without a critical text. A Jālandara appears among the 84 *siddhas* and in the line of the *Nātha-panthīya* teachers.
10. This follows from section 8 of the Arrian's *Indika*, equating Kṛṣṇa to Herakles and Indra to his Dionysos (not Śiva as is often done).

6

Early Brahmins and Brahminism*

In the preceding issue of this journal, I sketched certain hypotheses about the early caste system. We shall now consider, from sources not used in that note, supplementary evidence dealing particularly with the Brahmins.

1. In explaining *nān* compounds of negation (*Pāṇ*. 2.2.6) Patañjali says: 'Now all these words apply to a collective of qualities (such as) Brāhmaṇa, Kṣatriya, Vaiśya, Śūdra. Asceticism, (knowledge of the) scriptures, and birth—this is the making of a Brāhmaṇa. One without asceticism and scriptures is merely Brāhmaṇa-born. Thus, fair skin, cleanliness of habit, brown (eyes), tawny hair—these are the intrinsic qualities that make Brāhmaṇahood. Words applied to the collective apply also to members. Thus—the Pāñcālas towards the east; oil consumed; ghee consumed; white, blue, dark, black, etc. Similarly, the word Brāhmaṇa derived from the collective applies to members without birth or without the qualities. Without the qualities as for instance "*abrāhmaṇa* is he who urinates standing, *abrāhmaṇa* is he who eats standing". The word Brāhmaṇa is applied without birth either by uncertainty or misdirection. By uncertainty thus—having seen (a person) fair-skinned, clean-behaved, brown (eyed), tawny haired one concludes "this is a Brāhmaṇa"; then he ascertains that it isn't a Brāhmaṇa, "*abrāhmaṇa* is he". There the word Brāhmaṇa is applied by uncertainty and the meaning is negated by birth. By misdirection: misdirection is his (who is told) "in such a place is a Brāhmaṇa, bring him here". He, having gone there, concludes of whom he sees "that is a Brāhmaṇa". And thereafter he ascertains that it isn't a Brāhmaṇa, "*abrāhmaṇa* is he". There the word Brāhmaṇa is applied by misdirection, and the meaning negated by birth.

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(The prefix) *a*-(comes) therefore from doubt or misdirection. When one has seen a certain black (person), the colour of a heap of black beans, seated in the marketplace, one definitely concludes that that is not a Brāhmaṇa; one is convinced thereof.'

On this quotation, one may note in passing that the modern commentator Nāgojibhaṭṭa has lived up to the traditions of his calling by a fantastic explanation, that *gaurī* is a girl given away in marriage in her eighth year, *gaura* therefore her son. This would avoid all embarrassing comment upon dark-skinned Brahmins.

Patañjali was fully acquainted with local and temporal variations. *Purākalpa* = in olden times, marks many such changes. On *Pāṇ*. 1.2.64, 'the *kārṣāpaṇa* was in days of old of sixteen *māṣas*'. So in his preamble—'In olden days it was thus. After initiation the Brāhmaṇas studied grammar; after teaching them pronunciation, accent, intonation were Vedic words taught. Such is not the case today. Having learned the Veda, they immediately become orators. "We have learned Vedic words from the Veda, and those in common use are quite clear by usage; grammar serves no purpose".' Some observances he mentions are no longer the fashion. 'The sacrificers say, the son is to be named after the tenth day. The name should begin with a soft consonant; in the middle should occur *y*, *r*, *l*, or *v*; the first vowel should not be *ā*, *ai*, *au*. The name should be taken from the father's three immediate paternal ancestors; it should be applicable to the disembodied, and not of an enemy; of two or four letters, with a *kṛt* not a *taddhita* ending.' This custom might explain the multiple names we find for some kings; it does not seem to apply to names in common use even in Patañjali's day, while the modern name-day is the twelfth after birth. Patañjali takes words to be eternal: 'Thus one wishing to do something with a pitcher, having gone to the potter, says, "make me a pitcher, I shall do my job with it". But one wishing to use words does not, similarly, having gone to the grammarians, say "make me words to be used".' At the same time, he is aware of variations in usage from place to place: 'And in this very large field of application of the word, certain words are to be seen used in certain places. Thus for example (the root) *śav* is used for 'going' in Kamboja, the Aryans use *śava* only for a corpse; in Surāṣṭra *haṃm*, in the eastern and central regions *raṃh*, but the Aryans use only *gam*. For "cutting" *dā* is used in the east, *dātra* in the north.' For sects among the grammarians, we have in the comment on *Pāṇ*. 1.3.2 that the Bhāradvājīyas read in a certain way. Finally, he mentions casually observances that are certainly not allowed in post-Buddhistic official Brahminism, such as meat-eating. In his preamble 'Thus, by rules of what it is permitted to eat is implied what is forbidden. By the rule "five sorts of five-nailed animals may be eaten" follows this, that it is forbidden to eat the rest. Or, by what it is forbidden to eat follows what may be eaten. Thus "a village cock is not to be eaten, a village pig is not to be eaten"; from this it follows that the wild ones may be eaten.' On *Pāṇ.* 1.2.39 'Similarly, one hankering after flesh can't help bringing a fish with spines and scales; he, after having taken the useful portion, discards the scales and spines.'

Enough has been said here to show that Patañjali takes his examples from everyday life, and not from some theoretical conclusions based upon scripture. Moreover, he is fully acquainted with contemporary north-Indian life and usage. The emphatic statement, therefore, that a black man cannot possibly be mistaken for a Brahmin is worth considering seriously. We now show the contrary from other sources of not later date.

2. In the *Bṛhad-āraṇyaka Upaniṣad* (*Br.*) we are given certain incantations and ceremonies for procreation. The precise wording, of some interest in itself, runs thus in Hume's translation (which I follow generally for Upaniṣad quotations).

Br. 6.4.14. 'In case one wishes, "That a tawny (*kapilaḥ*) son with reddish-brown eyes (*piṅgalaḥ*) be born to me! that he be able to recite two Vedas! that he attain the full length of life!"—they two should have rice cooked with sour milk and eat it prepared with ghee. They two are likely to beget (him) (6.4.16). Now, in case one wishes that a swarthy (*śyāmo*) son with red eyes be born to me! that he be able to repeat three Vedas! that he attain the full length of life!—they two should have rice boiled with water and should eat it prepared with ghee. They two are likely to beget (him) (6.4.17). Now, in case one wishes, "That a learned (*paṇḍitā*) daughter be born to me! that she attain the full length of life!—they two should have rice boiled with sesame and should eat it prepared with ghee." They two are likely to beget (her) (6.4.18). Now in case one wishes, "That a son, learned, famed, a frequenter of council-assemblies, a speaker of discourses desired to be heard, be born to me! that he be able to repeat all the Vedas! that he attain the full length of life!"—they two should have rice boiled with meat and should eat it prepared with ghee. They two are likely to beget (him), with meat, either veal or beef (*aukṣeṇa vārṣabheṇa vā*).'

It is remarkable that the darker sons are the more learned, though this correlation seems to be purely accidental. For our purpose, it suffices that Brahmins could exist who were both dark and learned, for the incantation is definitely meant for the use of Brahmins. We might note in addition certain other features in the Upaniṣad that run counter to Patañjali's views. *Br.* 2.6 and 4.6 give the line of tradition (*vaṃśa*) which begins from Brahmā and comes down to Pautimāsya. *Br.* 6.5 again gives a (bifurcated) line from Brahmā to Pautimāsya. The difference is that the second and more important of these (which belongs to the Vājasaneyī school) is principally matrocline. That is, the teacher is given as his mother's son, not the father's as a general rule; so that, this may in fact have many more members in common than appears with the first *vaṃśa* in *Br.* 2.6 or 4.6. The great commentator explains this peculiar delineation by *strī-prādhānyāt*. Just why the mothers were more important is not clear. We have a further possible support in the *Chāndogya* (*Ch.*). *Ch.* 1.2.13 mentions a Baka Dālbhya as a chanting priest of the people of Naimiṣa. But in *Ch.* 1.12 we have a rather mysterious and possibly satirical 'chant of the dogs' (*śauva udgītha*), in which the officiating priest is called Baka Dālbhya or Glava Maitreya. The commentator Śaṅkara explains the two names for a single individual as deriving one from the father's and the other from the mother's side. This means that not only the child's clan name but also his personal name would differ in the two traditions, which can be explained only if at some stage and for some clans of Brahmins matriarchy was the rule. *Ch.* 4.4. gives the famous story of Satyakāma Jābāla, thus known because of his mother Jābāla. His mother says to him (*Ch.* 4.4.2) 'I do not know this, my dear—of what clan (*gotra*) you are. In my youth, when I went about a great deal serving as a maid I got you. So I do not know of what clan you are. However, I am Jābāla by name, you are Satyakāma by name. So you may speak of yourself as Satyakāma Jābāla.' The obvious meaning is that the child was illegitimate in the patriarchal sense, but had a position because of his mother; and as such the teacher Hāridrumata Gautama accepts him. Of course, our commentators step once again into the breach to explain that *paricāriṇī* here means not serving as a maid for livelihood but house-work for the parents-in-law; and that the poor mother was kept so busy in this way that she quite forgot her husband's *gotra*. There is a provision in Brahmaṇical scriptures that those who do not know their *gotra* but are indisputably Brahmins may be ascribed to the Kāśyapa clan. This has not been invoked here, and the teacher takes Satyakāma to be a Brahmin because he is truthful enough not to deny ignorance of his parentage.

3. The explanation of these two apparently contradictory views is fairly simple. These two strains of Brahmins belong to two different regions and originally perhaps to two different races. Patañjali is almost

certainly from the north-west frontier or the Punjab. For, though he mentions Magadha and Pāṭalīputra as well as Candragupta and Puṣyamitra (on *Pāṇ.* 1.1.68, 3.1.26) there seems to be little doubt from the general tone of his work that like his famous predecessor Pāṇini he is more familiar with the north-west which also trained the great Cāṇakya. On the other hand, the people who wrote the *Upaniṣads* seem to have been domiciled in or near the eastern United Provinces, as would follow from the importance given to Ajātaśatru of Kāśī (*Br.* 2.1). Of course, one must note the general view of some commentators that all these king-names are equally fictitious, meant only to point a moral; I prefer to take them as deriving from real historical beings. Moreover, the *Upaniṣad* writers are closer to the Bhārgava clan (*Tait.* 3) than is Patañjali. Śaunaka, if the *Mahābhārata* tradition is applicable here, is also a Bhārgava; the name is found in *Mund.* 1.1.3, *Ch.* 1.9, *Ch.* 4.3.

This is not all; for we see further that the pre-occupation of Patañjali's Brahmins is the Veda while that of the *Upaniṣads* falls into several layers of which the most prominent is the interpretation of Brahmā. Apparently these eastern Brahmins went to the frontier to learn the Aryan *yajña* tradition. We find in *Br.* 3.3 one Bhujyu Lāhyāyani saying to Yājñavalkya, 'We were travelling around as wanderers among the Madras. As such we came to the house of Patañcala Kāpya'. In *Br.* 3.7 Uddālaka Āruṇeya says, again to Yājñavalkya, 'We were dwelling among the Madras in the house of Patañcala Kāpya, studying the fire-sacrifice'. Not only is the fact remarkable that these traditionally early Brahmins go to the Madra country to study but one may note that the name Patañcala can very easily be connected with Patañjali. The grammarian himself warns against such mispronunciation as *mañjaka* for *mañcaka* at the end of his preamble. The great University, even in historic times, was at Taxila, not Benares or Patna.

The *Upaniṣad* Brahmins do not generally come off very well in philosophical discussions. We see in *Ch.* 5.3 that Śvetaketu Āruṇeya is completely floored when philosophical questions are posed by the Kṣatriya Pravāhaṇa Jaivali in the assembly of the Pāñcālas. The helpless Brahmin says in disgust 'Five questions has a wretched Kṣatriya (*rājanyabandhu*) asked me. I was not able to explain one of them.' The word *rājanyabandhu* is certainly not used in any complimentary sense here because we see in *Ch.* 6.1.1 the parallel *brahmabandhu* used of 'Brahmins unlearnt in the Vedas'. The word *brahmabandhu* is also known to Patañjali (on 1.1.50, 1.2.45, etc.), and we know from tradition that it applied in contempt peculiarly to Magadhan Brahmins. Even the great Yājñavalkya in *Br.* 3.6 finds it necessary to stop further questions from Gargi Vācaknavī. Again, while that sage is supposed to have instructed king Janaka, the Gārgya Bālākī knows much less philosophy than the later king Ajātaśatru in *Br.* 2.1

The point would be of less interest were it not for the fact that both Yājñavalkya and Bālākī expect substantial gifts from their royal patrons for the interpretation of Brahmā. The main idea is to gain some sort of a livelihood, and it is generally precarious. In *Ch.* 1.12 the white dog asks a priest 'Lord chant up food for us (*annaṃ no bhagavān āgāyatu*)', and the priest actually tries this with the full ceremony. Śaṅkara's comment raises the whole performance to a higher and more mysterious level by taking *śvā* to be some divine being or an ascetic, though nowhere is the possible explanation of a dog totem adduced, and in any case the purpose of getting food is not disguised. In *Ch.* 4.1–3 Raikva condescends to teach Jānaśruti for considerable reward, though addressing him with contempt as 'Śūdra'. *Ch.* 1.10–11 tells us of Uṣaśti Cākrāyaṇa who, (his crop?) wiped out by a hailstorm (*maṭacīhata*), migrates with his wife from the Kuru country. He has to subsist overnight on the leavings of wild (or rotten) bean broth given by an elephant-driver, thereby drawing strength enough to go off to the king's sacrifice. The Brahmins, therefore, are doing rather badly at this period, and changing over to the profession of fire-priests.

4. I propose the interpretation that Brāhmaṇa means a follower or descendant of Brahmā, and that the entire cult is pre-Aryan. The philosophy is presumably imposed by later experience while a great deal of the mysticism in the *Upaniṣads* must necessarily be due to defective transmission with consequently incomprehensible terminology. We find, however, one highly significant passage in which the god is not Brahmā but the Vedic deity Indra. In the *Kauṣītakī Upaniṣad* 3.1 Indra says to Pratardana Daivodāsī, 'Understand me, myself. This indeed I deem most beneficial to man—namely, that one should understand me. I slew the three-headed son of Tvaṣṭr. I delivered the Arurmagha (cf. *Ait. Brāh.* 7.28) ascetics to the wild dogs. Transgressing many compacts, I transfixed the people of Prahlāda in the sky, the Paulomas in the atmosphere, the Kālakāñjas on earth. Such was I then (*tasya me tatra*) that I never turned a hair (*na loma ca mā mīyate*). So he who understands me—by no deed whatsoever of his is his world injured, not by stealing, not by killing an embryo, not by the slaying of his mother, not by the slaying of his father; if he has done any evil (*pāpa*) his countenance will not blench.'

This passage is of the highest interest as an attempt to assimilate an

Aryan tribal god who must at one time have actually been a hero and leader in battle. In *Ch.* 8.7 to 8.9 we have Indra from the gods and Virocana from the Asuras going to Prajāpati to learn the true knowledge of the self. Only Indra completes the study while his rival returns with false understanding. On the other hand, this ruthless Indra who brags above about his exploits is definitely on the wrong side of the true Brāhmaṇical tradition. In the first place the descendants of Tvaṣṭr are mentioned in *Br.* 2.6 and 4.6 as in the direct line of tradition (*vaṃśa*) from Brahmā. Secondly, the slaying of the three-headed Tvāṣṭra seems to be a definite historical incident quite apart from its mention in Vedic literature. In ravaged Mohenjo-Daro seals have been found with three-headed animals, along with the remains of a beautifully carved image with three head-sockets—whether meant for three separate heads or three positions of one head. The whole passage above runs in the same tone, for throwing ascetics to the wolves was certainly not an act calculated to win Brahmin hearts. We know from Purāṇic tradition that a Prahlāda was the worshipper of Viṣṇu whereas Indra boasts of having violated treaties with the tribe. These actions of Indra are systematically against whatever the ancient Brahmins cherished. Therefore, we need not be surprised when Brahmā, the self-existent (*svayambhū*), nevertheless appears in *Br.* 1.4.6 as a mortal, inferior to the immortal Aryan gods created by him who are his superiors. The later pantheon has not yet been accepted; one may reasonably conjecture that the original cult of Brahmā was dying out. *Br.* 1.4.1 admits quite frankly that the Kṣtrahood rules even in heaven—an obvious recognition of the facts visible on earth, and of new cults introduced by Aryan conquerors.

The most interesting factor of the passage from the *Kauṣītaki Upaniṣad* is its plenary absolution for the believer which relates it directly to the basic philosophy of the *Bhagavad-Gītā*. The original cult of Brahmā could not survive the attack of the followers of Indra, any more than the civilization that went with it. The attempt to transfer the basis of religion to absolute faith in Indra is, as a matter of history, also unsuccessful, perhaps because the Vedic observances and traditions were clearly at variance with such a procedure. It is with Kṛṣṇa, the dark hero of the non-Aryans, that the transference is finally successful, the identification being with Viṣṇu, not Brahmā or Indra. For, by then, Vedic observances have died out, because of Buddhism. Kṛṣṇa is obscure enough to have a new philosophy written for him, but at the same time popular enough with the common people to make his cult really important. In the earlier *Upaniṣads* he is mentioned just once, in *Ch.* 3.17.6 '. . . when Ghora Āṅgirasa explained this to Kṛṣṇa the son of Devakī . . .'. Contrary to the general

Aryan custom the hero's mother alone is named. This name seems to exclude, for example Kṛṣṇa Āṅgirasa, a priest who is credited by the *Kauṣītaki Brāhmaṇa* 30.9 with the authorship of *Ṛgveda* X.42.1–3 and X.43.1–3. The far later Purāṇic tradition, as in the *Bhāgavata Purāṇa* 10.45.29–31 differs in that Garga is the fire-priest of the Yadus, hence initiates Kṛṣṇa (thereby implying that Kṛṣṇa is a Kṣatriya!) while the actual preceptor (*guru*) is Sāndīpani. The Jains, incidentally still maintain a tradition whereby their twenty-second Tīrthaṃkara Neminātha was the guru of Kṛṣṇa. All this seems to point to the conclusion that a popular non-Aryan hero has been claimed by various Brāhmaṇic clans, though not yet elevated to the supreme position he occupies in the *Bhagavad-Gītā* as divine exponent of the *Upaniṣad* philosophy with strong pragmatic modifications.

Our *Upaniṣads* are quite catholic in their choice of deities above whom Brahmā is to be elevated. *Ait. Up.* 3.13–14 gives a spurious etymology for Indra as one who sees Brahmā. The *Śvetāśvatara* emphasizes the one-god cult in extolling Rudra-Maheśvara, but Brahmā is the background for that deity. *Kauṣītaki* 1.3–5 makes Indra and Prajāpati doorkeepers to Brahmā. Yet, all this did not preserve the Brahmā cult. The philosophy could succeed only with the vehicle of a really popular hero. For example, the Brahmin Rāma, i.e. Paraśurāma, is later made an incarnation of Viṣṇu for heroism against the Kṣatriyas whom he 'annihilated' twenty-one times! But he is unable to carry any part of the philosophical superstructure. This same personage may be the Rāma Mārgaveya of *Ait. Brāh.* 7.27–34, where the clan-name being otherwise unknown, may presumably be emended to Bhārgaveya. His heroism is restricted to claiming a sacrificial potion for his family, the Śyaparṇas, from king Viśvantara Sauṣadmana, by argument. But the chronology is uncertain, as Janamejaya Pārikṣita's sacrifice is supposed to have been an earlier event. Support for the identification is found in the Anukramaṇi citing Paraśurāma as the author of *ṚV*. X.110. The only Rāma mentioned in that Veda (*ṚV*. X.93.14) is a king described as *asura*, which is taken to mean 'powerful'. The epic hero Rāma is far more popular, but is nowhere mentioned in the older Brahmaṇical literature where his father-in-law, Janaka of Videha, figures so prominently. Whatever the real historical basis of the Rāma legend, that hero was clearly a Kṣatriya while his protagonist Rāvaṇa is a Brahmin who had proved superior in prowess to Indra himself. Kṛṣṇa was not only popular but traditionally a foe of Indra. Though the *avatāra* theory states that Viṣṇu is incarnated at the end of an epoch (*yuga*), when Brahminism is in danger, no such excuse is to be found in the circumstances of the *Mahābhārata*, where Kṛṣṇa's own army fights on the other side, and where his primary function seems only to lead Kṣatriyas to destroy each other. Thus, Kṛṣṇa's being chosen as the origin of the *Gītā* acquires a new significance.

5. The thesis may be stated in recapitulation: our *Upaniṣads* represent a long process of assimilation and adoption of foreign ritual as well as philosophy by the indigenous Brāhmaṇas, who could not all have been associated with Kṣatriyas from the earliest times. Both the *yajña* and its philosophy have clearly been acquired from Kṣatriyas; for the Pāñcāla oligarch Pravāhaṇa Jaivali says explicitly (*Ch.* 5.3.7, and *Br.* 6.2.8) that Gautama, who had begged this knowledge of him, would be the very first Brahmin to possess it. This would be incomprehensible if all Brahmins had always been Aryan priests. Again, I take the cult of Brahmā as non-Aryan or pre-Aryan in India. This is the only way in which one can explain, besides the previous references, such passages as *Kena* 14–28 which shows that the Aryan gods Agni, Vayu, and Indra could not recognize Brahmā (we ignore the philosophic refinement which distinguishes between the masculine and the neuter *brahman*) at sight, the identity of the strange divine apparition being revealed to Indra by Umā, daughter of Himavat. Nevertheless, it is again a Kṣatriya-like king Ajātaśatru of Kāśī who has to give the philosophical interpretation of Brahmā (*Br.* 2.1, *Kauṣītaki* 4) to a Brāhmaṇa, the Gārgya Bālākī. We have referred to the various lines of tradition, as at the end of *Br.* 2, *Br.* 4, *Br.* 6, of which the first two are almost identical and contain two Tvaṣṭras, Viśvarūpa Tvāṣṭra being presumably the famous 'three-headed' *purohita* slain by Indra, *Ṛg-veda* 10.8.8–9). Yet *Br.* 6.3.7–12 gives another *vaṃśa* which seems distinct from the three main lines, namely Uddālaka Āruṇi to Vājasaneya Yājñavalkya to Madhuka Paiṅgya to Cūla Bhāgavitti to Jānaki Āyasthūṇa to Satyakāma Jābāla. It is certain that several lines have been combined, and also clear that a tradition which reports the words of Ajātaśatru (whom I am compelled to identify with the Magadhan emperor who ruled at the time of the Buddha's death) cannot have come unchanged through a line of teachers that covers as many as 58 consecutive names, mostly older. Hence, the original teaching must have been something totally different, perhaps that of the lost cult of Brahmā. One may note other evidences of synthesis. The *Atharva Veda* is mentioned as such only in *Ch.* 7.1.2, 7.2.1, 7.7.1 and *Muṇḍaka* 1.1.5; in all other cases, it is not a Veda but called by its secondary appellation Atharvāṅgirasa, which becomes significant as, in the same context, the *Ṛk-*, *Yajur-* and *Sāma-* are called Vedas explicitly. The interpretation is that the Brāhmaṇic tradition

is still being crystallized in some parts of the country, ritual coming before philosophy, but both oriented towards assimilation of the Kṣatriyas. The fourth Veda has not yet been accorded a regular place in the canon.

From archaeological research alone could there be any valid support or contradiction for the foregoing analysis. A single exploratory trench dug across a large mound in Sind proved the existence of a great pre-Aryan civilization in India, and also how much further Indian excavations had to go before touching the earliest strata. Archaeology may not help decide whether Indra was sometimes the title of a deified human, tribal leader. But the *Kauṣ. Up.* passage is confirmed by the *Bṛhaddevatā* 6.53, which gives the same exploits as of an Indra Vaikuṇṭha, specified as human. This is based directly upon *ṚV.* X.48–50, which three hymns again cast a new light upon the '*yan māṃ vijānīyāt*' of the Upaniṣadic Indra, while showing the origin of parallel divine proclamations by the infant Nārāyaṇa to Mārkaṇḍeya in *Mbh.* 3.187 and Kṛṣṇa to Arjuna in the *Bhagavad-Gītā* 10.

Similarly, whether Ajātaśatru of Kāśī was the Magadhan ruler of the sixth century BC might be decided by extensive digging in Bihar and at the old fort in Benares, where the only excavations have been for constructions which still further obstruct the site. Even in the days of Buddha and Mahāvīra, Kāśī had lost its independence, the joint state Kāśī-Kosala being ruled by Pasenadi, whose throne was violently usurped by his son Viḍūḍabha, after whose brief reign the only power in Kāśī-Kosala-Videha was that of the Vajji-Licchavi oligarchs. We know that this in turn was broken by Ajātaśatru. Though himself a parricide son of Buddha's friend Bimbisāra, this Ajātasattu is represented in more than one *sutta* as of a philosophical turn of mind, eager to look into the tenets of various sects. This would be inexplicable without some foundation in reality; for our purpose, it suffices that no earlier Ajātaśatru can be found in fable or history. In any case the Oldenberg-Keith view that the *Upaniṣads* must necessarily precede their derivative, Buddhism, is not only refuted by the lack of mention of any *Upaniṣad* in Pāli literature, but also by the position accorded to Brahmā—just a divine admirer of the Buddha along with Indra and the *tāvattiṃsat* gods. The evidence for original and revolutionary Kṣatriya religious philosophy is overwhelming, in that Pārśvanātha, Mahāvīra, Buddha, and the leaders of the oldest *śramaṇa* sects are all Kṣatriyas. Thus Aśvapati Kaikeya (*Ch.* 5.11) and Pravāhaṇa Jaivali are not improbable teachers of the Brahmins, who had to learn in order to effect the assimilation which is found even in Aśoka's rock-edicts. The bounds to this sort of investigation are obvious, to be crossed only by planned excavations in Brahmāvarta, the traditional land between the Sarasvatī and the Dṛṣadvatī, say from the dry bed of the Ghaggar to Delhi.

6. Brahmā is not an Iranian deity but then neither is Indra. One possible method of approach would be to compare the two branches of Aryan tradition, and take the common factor as the truly Aryan nucleus, the rest being borrowed. This method will not work very well for the simple reason that both the Iranian and the Indic Aryans, besides belonging to different groups, destroyed or at least conquered far older civilizations, and assimilated several cultural elements from them. This by itself could have been allowed for, had there been no contact and interchange between these two older cultures. But we know from archaeological evidence and the earliest *avatāras* of Viṣṇu that there was a great deal of intercourse, trade as well as cultural, between the Indus valley and Mesopotamia. The mountain Meru which occupies such a central position in older Sanskrit legend could very well be *Sumeru*; we know that the Sumerian *zikkurat* represented a mountain upon which the gods dwelt, as on Meru. Much the same difficulty would arise in a purely philological approach, for in such ancient times we know that language itself was one of society's great achievements, and that the clear-cut groups which develop later have still a great deal in common. For example, consonants such as *ṇa*, *ṣa*, *ḷa* do not occur generally in Aryan languages outside India. Words like *maṇi* = bead, *paṇa* = coin, *phaṇā* = the hood of a cobra could, plausibly, belong to the Indus valley people because the objects are found there. But *gaṇa* = tribe may be a mispronunciation, for the institution as well as the word are known among Aryans outside India; were both borrowed by them from pre-Aryan civilizations? It is still worse with *ṣa* while the elimination of *ḷa* from Sanskrit at an early stage as contrasted with its survival in Dravidian languages as well as the Prakrits raises more questions than can be answered simply. Similarly, the Sātavāhana custom of giving the mother's name, or matriarchy in South India, does not help us because we are discussing Brahmins, and at a far earlier period. But there exists one Sanskrit word, *bandhu* which means both brother and husband, whereas the general Indo-Aryan *bhrātṛ* cannot be connected so easily with group marriages. It is seen that, for all these reasons, we have to rely in the main upon the type of analysis followed earlier in this note.

7

On the Origin of Brahmin *Gotras**

1. The word *gotra* in the *Ṛgveda* means only a herd of cattle or a pen for cattle. In later times, down to the present day, it has the meaning of an exogamous patriarchal family unit, corresponding roughly to the *gens* in Rome. The words *gaṇa* and *jana* would seem more logical had the system been directly inherited from the Aryans, but they mean group or aggregate, and tribe respectively. In the *Ṛgveda* at least, we have no explicit statement of the current rules for exogamy; *RV.*[1] x.10 shows in a dialogue between Yama and his importunate twin sister Yamī that such extremely close unions were regarded with horror by the male; but the *patria potestas* is absolutely clear and marked, in that it is the spirits of the paternal ancestors exclusively who are propitiated by the cult of the dead, and the predominant deities of the pantheon are male.

Nevertheless, the *gotra* system is an outstanding feature of modern Brahminism, which has otherwise made so many compromises in the matter of worship and ritual. Apparently only the Brahmins have *gotras*, for the lowest caste, that of the Śūdras, has no gentilic organization at all in our scriptures; tribes and guilds were enrolled later by deriving them as mixed castes (cf. *Manusmṛti* x.8, 11, 13, 18, 22, 23, 34 etc.) from the principal four without imposition of the *gotra* system. For the ruling warriors and the trader-yeomen, the Kṣatriya and Vaiśya castes respectively, we have the Brahmanic ritual such as the initiation ceremony etc., but their *gotras* are restricted. In the first place, Brahmin *gotras* are grouped into larger units (probably corresponding to the phratry) by common *pravaras*, of which Baudhāyana recognizes 49 sets in a far larger—almost unlimited—number of *gotras*, while in theoretically accepted lists as they now exist (*GPN*, pp. 207–85), we find not less than 73. For the

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Kṣatriya and the Vaiśya, however, there is only one *pravara* each, namely Mānava-Aila-Paurūravasa and Bhālandana-Vātsapri-Māṅkila, respectively, while Āpastamba and Kātyāyana are content with deriving both from Manu. But there is a very prominent rule for both these castes, namely that for marriage groups the *gotra* is to be taken as the same as that of the family priest, the *purohita*. (*GPN*. 126–7).

All this implies that the *gotra* is a purely Brahmanic institution which has been extended to the other two upper castes by Brahmin superiority. In support, we find that instead of the animal or food-tree totems of savage tribes, the *gotras* are always derived from the names of sages. I propose to show in this note that this system cannot have been present from the oldest times, and that there is considerable reason for believing the tradition to have been inverted (like several other prominent Brahmanic traditions which we shall point out) when the original situation had retreated into legendary antiquity and become too derogatory to acknowledge under the changed circumstances. My thesis is that, specifically as regards some important Brahmins, the *gotra* system is adopted by small groups of pre-Kṣatriya and pre-Aryan people from Aryan invaders; as these groups take to the functions of priesthood, they are most logically asigned to the patriarchal clan-group of those for whom they officiate. They consequently acquire the same *gotra*; only afterwards does the rule become its opposite, when the Vedic Kṣatriyas have died out by the rise of settlements and the emergence of other warriors of obscure origin who fight their way to the top. At that stage, it becomes quite possible to assign to these newcomers the same *gotra* as that of the priests, who have maintained a continuity of tradition and acquired a monopoly of scripture by long and arduous study. I do not mean to imply that all *gotras*, or even all Brahmin *gotras* originate in this way.

Before proceeding to the proof, such as it is, one can note that the entire position of *gotra* and *pravara* is confused if one looks at it as a whole, and there is no historical or political reason given for the confusion though clearly part of the trouble arises from the fact that *gotra* lists could not be closed, and that newcomers were obviously being recruited into the ranks of the priesthood. The Nāgara Brahmins of Gujarat are supposed to be medieval immigrants. If the institution of marriage were so strictly bounded by caste and *gotra* rules, it would be difficult to explain the strong racial heterogeneity of Brahmins in India, as well as existence of endogamous regional units within them (amounting to sub-castes) which have no basis in scripture.

The Classification of Gotras

2. The various lists of the principal authorities, namely Baudhāyana and Kātyāyana-Laugākṣi seem to agree on the whole with the *Matsya Purāṇa* which has presumably been copied, with local variants, from the earlier lists. But there are serious differences of detail, as one sees at once on looking into individual cases. For example the Āśvalāyana *gotra* is ascribed variously to the Bhṛgu, Kaśyapa, and Vasiṣṭha groups (*GPN.* 36.16, 100.21, 106.4, 176.8) while the apparently related Āśvalāyani belong to the Bharadvājas (*GPN.* 59.11, 61.15, 163.7), and Āśvalāyanin is a Kaśyapa *gotra* according to the *Matsya Purāṇa* (*GPN.* 102.8). It would be quite easy to give many more such examples, though one would then have to go deeper into the distinctions between names that are quite close in sound, and also into the text-criticism of our sources, which have yet to be edited properly. But there is a class of double *gotras* which are not easy to explain unless in fact the *conscripti* were added to the original *patres* at several later stages and then not always added to the same group. We get the following combined *gotras*, whose members cannot intermarry with either *pravara* group (*GPN.* pp. 180–5) Śauṅga-Śaiśiri = Bharadvāja + Viśvāmitra; Saṅkṛti—Pūtimāṣa = Kaśyapa + Vasiṣṭha, being in fact Vasiṣṭhas by day and Kaśyapas by night; Devarāta = Jamadagni + Viśvāmitra; Jātūkarṇya = Vasiṣṭha + Atri; Dhanañjaya = Viśvāmitra + Atri; Kata & Kapila = Viśvāmitra + Bharadvāja; Vāmarathya = Vasiṣṭha + Atri; no Bharadvāja can marry any Ucathya-*pravara* Gautama. The brief *soma*-hymn ix.86 has traditionally the joint authorship (besides Atri and Gṛtsamada) of three double-named *gaṇas* not to be found elsewhere. The double name of Baka Dālbhya = Glāva Maitreya (*Chāndogya Upaniṣad* i.12) may be explained as a survival of matriarchal tradition.

These are the officially admitted discrepancies, not oversights, and the explanation given is that these *dvyāmuṣyāyaṇa* are descended from adopted sons or bought, or descended through a brotherless daughter, or acquired in some, such 'artificial' manner in order to perpetuate the cult of the dead, who would otherwise fall from heaven. But let us look for a moment at the largest groups into which the *gotras* are combined, which are only eight and which show how the historical reality was readjusted in theory to the needs of a growing system (and of course the converse in practice).

The *gotra-kāra* ṛṣis are 1. Jamadagni, 2. Bharadvāja, 3. Gotama, 4. Kaśyapa, 5. Vasiṣṭha, 6. Agastya, 7. Atri, and 8. Viśvāmitra. No Brahmin *gotra* is valid that does not contain the name of one of these or his (supposed) descendants and the *pravara* groupings contain the names of one, two, three, or five in one line. But these are not the original ṛṣis even in Brahmanical theory. A Brahmin is the descendant of Brahmā, as such, has one of the ancestors: 1. Bhṛgu, 2. Aṅgiras, 3. Marīci, 4. Atri, 5. Pulaha, 6. Pulastya, 7. Vasiṣṭha. Some measure of accord has been restored by taking Jamadagni as the descendant of Bhṛgu, a tradition which there is no reason at all to doubt though why Bhṛgu himself could not survive in the previous list has to be explained. Bharadvāja and Gotama are then descendants of Aṅgiras, which might pass. With less justification, Kaśyapa, Vasiṣṭha and Agastya are taken to be descended from Marīci, and for no immediately apparent reason Viśvāmitra is made a descendant of Atri. This explanation from the *Matsya Purāṇa* could only have been made if there were some need for it and if it were not against what was generally current at the time of writing. It is to be noted that Vasiṣṭha has a secondary and not independent position, while Pulaha and Pulastya have disappeared, the explanation being that they generated Rākṣasas and Piśācas respectively, beings that are some sort of demons, (which, as we shall see, means non-Aryans) [and have] in any case nothing to do with Brahmins as such. Nevertheless, one finds both these names in the *gotra* lists. Pulaha is ascribed by Kātyāyana to the Agasti group while a Pulasti appears as a Bhṛgu-Veda or Agasti; Paulastya also as a Jamadagni, perhaps the Palasti of iii.53.16. These could only have been so indicated if the particular *gotra*-names had actually existed within the living tradition. In other words, the conflict of tradition goes back very far, to the original sources.

Finally, there are the additional ten families which are ascribed to just two major groups: Vītahavya, Mitrāyu, Vena, Śunaka to Bhṛgu; Rathītara Mudgala, Viṣṇuvṛddha, Harita, Kaṇva, Saṅkṛti to Aṅgiras. These are the *kevala* or 'occasional' Bhārgavas and Aṅgirasas respectively, for they had followed professions other than those of priesthood (as can amply be confirmed by tradition, independently of these *gotra* lists) before becoming priests. We now have to see whether there is other evidence for such change of caste, and then to look deeper into the tradition for the actual characters named here.

Historical Evidence for the Existence of Gotras

3. It is not my purpose to trace the entire development of the *gotra-pravara* system, even if there existed material with which this could be done. That the system did expand is certain, for it has catered to the needs of an increasing population while assimilating an additional number of regional and racial groups which could not possibly have belonged to the

Vedic categories. Some of this has been reflected in the *gotra-pravara* confusion. For example, my own *pravara* is Vasiṣṭha-Maitrāvaruṇa-Kuṇḍina. But looking into the genealogies, the position of Maitrāvaruṇa is anomalous, for this hyphenated sage is then son of Vasiṣṭha but also his father; in some stories, Vasiṣṭha is born of the ejected seed of Mitra and Varuṇa (vii.33.9–13), who are gods and not ascetic ṛṣis. Thus Vasiṣṭha is himself Maitrāvaruṇa. In addition, there seem to be Kauṇḍinyas among the Bharadvājas (*GPN*. 163.1). There is no point in speculating how all this came about nor in attempting an explanation for every detail of the entire system. Let us first see whether there is any historical evidence for *gotras* other than the Brahmin.

Some *gotras* are found in inscriptions. A well-known case is that of the Sātavāhanas, who have a Vāsiṣṭhīputra (Puḷumāvi), at least one Gotamīputra (Yajñaśrī Sātakarṇi), a Māṭharīputra etc., while Bhavagopa, the commander-in-chief of Yajñaśrī's army is called a Kauśika in the Nasik cave inscription. Though they gave plentifully to the Buddhist Saṃgha, the Nānāghāṭ inscription (of Nāganika?) as well as the Nasik inscription of Puḷumāvi show that these kings were completely Brahminized, conscious followers of Brahmanic ritual. The same double loyalty without conflict appears in Hāla's *Saptaśatī*. Now it is remarkable that the *gotra*-names are all found in Brahmin lists, and this would give support to the current rule that the Kṣatriya is to be known by his *purohita*'s-*gotra*. We need not stop to consider whether the reference by matronymic is indicative of a matriarchal system; such reference is also to be found in the genealogy at the end of the *Bṛhadāraṇyaka Upaniṣad*, for the succession of Brahmin teachers.

The Sātavāhana kings are about the last complete line found in the *Purāṇas*,[2] as would be expected from the probable date of revision of the documents and the dynasty's close association with Brahmins. But let us go back to the previous dynasty, the Kāṇvāyanas, the last of whom was killed by Simuka Sātavāhana. These kings were themselves Brahmins according to the explicit statement of the *Purāṇas*, and the first Kāṇvāyana Vāsudeva was a minister who usurped the throne after killing the last of the Śuṅgas. Now both the Śuṅgas and the Kāṇvāyanas are to be found in *gotra* lists. We have noted the Śauṅga-Śaiśiri confusion above; a famous *sūtra* of Pāṇini (4.1.117) ascribes Vikarṇa, Śuṅga, Chagala to the Vatsa, Bhardavāja and Atri groups respectively. There is no need to doubt the genuineness of this *sūtra* in spite of its not having been commented upon by Kātyāyana or Patañjali, for it is simple enough not to need any comment and in any case the detailed attention which Pāṇini pays in the entire section to *gotra* derivatives shows both the actual existence of the system in his day as well as its great importance. Turning to our *gotra* list we only find a Vikarṇeya ascribed to the Kaśyapas by a variant of the *Matsya Purāṇa* (*GPN.* 103.20), whence it may be assumed that the *gotra* was extinct by that time. In antiquity, the 21 Vaikarṇeyas are against Sudās and overthrown (vii.18.11). Chagala is still an Atri *gotra*. Śuṅga and Śauṅga are be given among the Bharadvājas (*GPN.* 57.14 & 62.15), while the Kāṇvāyanas are uniformly enrolled as Bharadvājas though Kaṇva and Mahākaṇva are put by the *Matsya* among the Vasiṣthas (*GPN.* 177.23 & 113.12). However, the concordance is good enough, and again shows agreement between a king's *gotra* and that of his priests, admitting that the priest was likeliest to become a minister.

To go back further, into the realm of pure tradition, we hear of a Gautama Śvetaketu yielding to the superior philosophical knowledge of the Kṣatriya Pravāhaṇa Jaivāli (*Bṛhad. Up.* 6.2). Remarkably enough, the Pravāhaṇeyas are still found in the list as Bharadvājas (*GPN.* 56.5 & 162.20, on the authority of Baudhāyana), which is a branch of the Aṅgirasas as are the Gotamas. Śvetaketu is also called Āruṇi, which has a doubtful position, perhaps a Bharadvāja (*GPN.* 57.16). Jaivāli is a Pāñcāla and the Pāñcālas form now a Kaśyapa *gotra* (*GPN.* 96.21 & 174.3). The point is that the Pāñcālas are an entire (composite) tribe, and it is conceivable that some of the Pāñcāla Brahmins—if indeed the name means the same thing in both cases—could have been Kaśyapas. The name is associated with a definite locality, and there is no need for a locality to have been occupied altogether by people of the same *gotra*, though we know that clan territories did exist in all countries under certain circumstances. The Kaurukṣetris are Bharadvājas (*GPN.* 59.18 & 163.12) while the Kauśāmbeyas (of whom I am not one in spite of the surname) are Bhṛgus (*GPN.* 32.1 & 43.15).

Gotras in Older Indian Tradition

4. So far, we seem to have reasonable confirmation of the *gotra* theory as it now stands. But let us go back still further. Identifying *gotras* of famous names is not always easy and proving their historicity apart from tradition even less simple. Pāṇini's existence is not in doubt. But why are the Pāṇinis ranked among the Bhṛgus by Baudhāyana (*GPN.* 30.3), Viśvāmitras by Kātyāyana (*GPN.* 90.10) and the *Matsya* (*GPN.* 171.2)? The great commentator Patañjali is uniformly a Bharadvāja in the *gotra* lists.

That the other two upper castes had their own distinct *gotras* is quite clear from Patañjali's commentary on Pāṇ. 2.4.58, where he also quotes the opinions of other grammarians on *gotra*-derivatives; two Vaiśya *gotras* seem to have been Bhāṇḍijaṅghi and Kārṇakharaki. Buddha quotes a verse as by Brahmā Sanatkumāra to the effect that among those with *gotras*, the Kṣatriya is chief (in *Dīgha-nikāya* 3, and again in 27). There occur Brahmin *gotra* names in Buddhist stories of the earliest period, and even comparatively rare ones like Pauṣkarasādi of the *Dīgha-nikāya* are to be found in the lists (*GPN*. 111.10). But we also find Kṣatriya *gotras* given on occasion. It is clear from Buddha's arguments with the Brahmins of his day that the Kṣatriyas did have a *gotra* system of their own, and many families took immense pride in the purity of their lineage. Buddha (descended from Okkaka = Ikṣvāku,[3] by tradition) claimed the *ādicca* (= *āditya*) *gotra*, and if the Buddha himself is Gotama, it can only be his personal name as his mother's son; for his step-mother, his mother's sister, is Mahāprajāpatī Gotamī and marriage within the *gotra* is excluded. The story of Viḍūḍabha senāpati (*Majjhimanikāya* 87, 90; *Dhammapada Aṭṭhakathā* iv.3) shows that the Buddha's tribe, the Sakkas, cheated their overlord king Pasenadi of Kosala (supposedly of the low Mātaṅgas, according to the *Lalita-vistara*) with Vāsabha-khattiyā (the daughter of Mahānāma Sakka by a *dāsī* concubine) when he desired a Sakka girl as his queen. The result was that the son Viḍūḍabha, after usurping his father's throne, took the first suitable opportunity for wiping out the insult and the Sakkas together, washing his throne with their blood. Nothing is said of the priestly *gotras* being those of their royal masters. King Pasenadi was generous to many Brahmins, among them the Pauṣkarasādi above, who is a Vasiṣṭha and the Brahmin Lohicca, whose *gotra* is presumably Lohita, uniformly given as a Viśvāmitra; both, apparently, had performed costly fire-sacrifices for Pasenadi. But here one can at least set down a reason for imposing the priest-*gotra* upon the other two eligible castes: that the Brahmins alone preserved the *gotra* system in spite of later changes, both in the structure of society and in its provincial recorganization. Recruiting new members into the other two castes needed much less specialized training in the traditional ritual than recruitment into the Brahmin caste—which undoubtedly also occurred in much smaller proportion.

This specialized training of the Brahmins was in the scriptures, primarily the Vedas. Of these, the *Ṛgveda* is the oldest and the most authoritative, and we should expect some information from the traditional method of its transmission. In fact, we find that books ii to viii are 'family books', the hymns being written (at least in theory) by particular families,[4] and supposed to be their special property; this is borne out to a considerable extent by the style of composition and sometimes by the specific blessings called down upon the seers. One could reasonably expect these seven family books to belong to the seven families of *gotra*-founders, or of the seven original sons of Brahmā. But in fact the list differs from both, being: ii. Gṛtsamada (Bhārgava), iii. Viśvāmitra, iv. Vāmadeva (Gautama), v. Atri, vi. Bharadvāja, vii. Vasiṣṭha, and viii. the Kaṇvas. Jamadagni hasn't disappeared altogether, for he is mentioned several times with special favour: the phrase *gṛṇānā Jamadagninā* in iii.62.18 and viii.101.8 shows that the special form of panegyric ascribed to the Jamadagnis was approved of by both the Viśvāmitras and the Kaṇvas. Similarly in vii.96.3, *gṛṇānā Jamadagnivat stuvānā ca Vasiṣṭhavat* shows that the Vasiṣṭhas did not think badly of it; ix.97.51 ascribed to Kutsa Aṅgiras has *ārṣeyam Jamadagnivat*, while the priceless gift (of speech) to Viśvāmitra in iii.53.15 is *Jamadagnidattā sasarparīh*. Nevertheless, the *ṛṣi* has not a book to himself in spite of founding a principal lineage. The *Dīgha-nikāya* (3, *Ambaṭṭha-sutta*) gives the list of Brahmin teachers presumably Vedic, as Aṭṭaka, Vāmaka, Vāmadeva, Viśvāmitra, Jamadagni, Aṅgiras, Bharadvāja, Vasiṣṭha, Kaśyapa, Bhṛgu; of these the first seems to be Aṣṭaka, author of x.104, son of Viśvāmitra by Mādhavī (*Mbh.* Crit. Ed. 5.117.19), and the second is unknown unless the name is taken as Vāmaka, which may be found in one of the later cyclic Saptarṣi lists for the various *manvantaras*. The Saptarṣis according to the Vedic *Anukramaṇī* seem to be, in order, Bharadvāja, Kaśyapa, Gotama, Atri, Viśvāmitra, Jamadagni, and Vasiṣṭha (on ix.67, ix.107, x.137; seven ṛṣis mentioned without names in x.82.2, x.109.4). The one constant feature of lists naming the founder ṛṣis is their number—seven.

A surprising deficiency is that there is no Kaśyapa book of the *Ṛgveda*. The name is mentioned only once, in the very last hymn of the ninth book (ix.114.2), which may be a later addition; the *Anukramaṇī* tradition (which I generally accept whenever possible) ascribes to Kaśyapa several hymns such as for example i.99, 101–15, and the Kaśyapas are more frequent authors than any other group in the book dedicated to Soma, namely the ninth, but this is hardly in keeping with the position of Kaśyapa in the *gotra* system. The name itself is totemic, having the secondary meaning of a tortoise. The objection that we know of no totemic rites in connection with a tortoise is negated by the injunction that one must be built into the fire altar (*Śat. Brāh.* vii.5.1); as the heads of all five main sacrificial animals, including man, horse, and bull are so utilized, the use of a tortoise is significantly totemic. Fainter is the indication one obtains from the inclusion of the tortoise in the 'five five-nailed animals that may be eaten.' Not only is Kaśyapa a prominent *gotra-kāra*, but no less an authority than Baudhāyana says that if by mistake both parents are found to belong to the same *gotra*, the embryo may be taken without blame as a Kaśyapa (*GPN*. p. 136, *garbho na duṣyati, kaśyapa iti vijñāyate*), though others like Āpastamba would consider the child as an absolute outcaste, *cāṇḍāla*. Similarly, if one's own *gotra* and that of the family priest be both unknown for some reason, we have the authority of Satyāṣāḍha, who seems to quote a still older source, to the effect that the *gotra* must be taken as Kaśyapa: '*gotrasya tv aparijñāne kāśyapam gotram iṣyate*' (*GPN*. p. 187). The very same Satyāṣāḍha states that Kaṇvas and Kaśyapas are not to be recipients of sacrificial fees: *na kaṇva-kāśyapebhyaḥ* (*Śat. sr. sūtra* 10.4); the commentator Gopīnāthabhaṭṭa hides his bewilderment under the ridiculous explanation that Kaṇva means deaf and Kaśyapa the one-eyed! We have seen the *Anukramaṇī* and *Bṛhaddevatā* schemes relate the Kaṇvas to the Aṅgiras group, but *Mbh.* 1.64.25 calls the sage Kaṇva a Kaśyapa, inverting the *Ṛgvedic* scheme. This ṛṣi has the position of stage-director in the Śakuntalā episode, which qualifies him to a special claim on the Bharatas (*Mbh.* 1.69.47–8), supposedly descended from the son of Śakuntalā (herself a daughter of Viśvāmitra by an *apsaras* Menakā = 'the woman'), but in any case a real historical people with a central position in the *Ṛgveda*. This is how Kaśyapa is gradually promoted to be a father of all creatures, fit to receive the whole world as his sacrificial fee (*Śat. Brāh.* xiii.7.1.15). This again demonstrates the inner heterogeneity of Brahmin tradition, and proves that both Kaśyapas and Kaṇvas are latecomers into the Vedic fold. Nevertheless, the seven traditional Brahmin groups are undoubtedly very old, no matter what their actual original names might have been. That the claims of Kaśyapa and the Bhṛgus could be permitted only means that a considerable part of the Brahmin priesthood acknowledged the special position of these later *conscripti*; this again supports the thesis that Brahminism itself comes into being by the adoption of indigenous pre-Aryans priests. Kaśyapa is a *prajāpati* later on, one from whom almost all living creatures are descended (*Mbh.* 1.59.10 ff.), which would then account for the special importance attached to that *gotra*. The Agastyas are also not prominent in the oldest Veda, though ascribed the authorship of i.166–91, mentioned in i.117.11, and x.60.6.

The Ṛgveda as a Source-book; Tvaṣṭṛ

5. We have therefore to look at the central groups left to us if the oldest source, namely the *Ṛgveda*, is to be analysed. These groups are the Bhṛgus, Aṅgirasas,[5] Atris, Vasiṣṭhas, and Viśvāmitras. Of these, the first

two are closely associated. The story of Cyavana's rejuvenation, for example, goes back to i.117.13. the hymn being ascribed to Kakṣīvān who is an Aṅgiras, while Cyavana (or here Cyavāna) is supposedly Bhṛgu; but the *Śatapatha Brāhmaṇa* (iv.1.5.1–13) is doubtful whether the aged ṛṣi was the one or the other. Gṛtsamada and the Gārtsamadas are Bhṛgus in the *gotra* lists, but the *Anukramaṇī* calls him son of Śunahotra Aṅgiras at the beginning of his special book, ii. Vatsa is still a Bhṛgu-Jamadagni *gotra* (my mother's) but the earliest known ṛṣi named Vatsa is called son of Kaṇva (viii.8.8), hence a *kevala-aṅgiras*. Nodhas Gotama says in i.58.6 that the Bhṛgus have brought fire to mankind, and in 1.60.1 that Mātariśvan had brought fire as a gift to the Bhṛgus; this is confirmed by x.46.2, 9—a hymn ascribed to the principal Vaiśya *gotra* founder, Bhālandana. Even the Viśvāmitras have the same ideas, as expressed iii.5.10. But the association of the Aṅgirasas with fire and the first discovery of fire is also well attested, as for example in 1.83.4. The Atris have one peculiarity which distinguishes them from the other particular families of *Ṛgvedic* seers; they alone are mentioned often outside their own book. In the Kaṇva book, for example, viii.35–8, 42, etc. we find them prominent, while viii.36 is by Syāvāśva and the Atris or the Atris alone. They also occur in vi.50.10, vii.68.5, vii.71.5 and are therefore respected by or associated with both the Bharadvāja-Aṅgiras and the Vasiṣṭha groups. We cannot expect much in the way of special features from these. It might be objected here that the Aṅgirasas and to a lesser extent the Bhṛgus also appear prominently outside their own books. Actually, a distinction has to be made between the remote deified ancestors, those in the middle distance on the dividing line between myth and history, and those contemporary with the hymn. These three stages are seen for the Aṅgirasas in x.62 (by the seer Nābhānediṣṭha), in a prayer addressed to the Aṅgirasas themselves; the important middle stage being in x.62.7, which mentions unity with Indra, i.e. going over to the Aryans. A tendency to respect the legendary and scorn the modern ṛṣis is manifest in the *Śat. Brah.*: 'Now when the Bhṛgus or the Aṅgirasas attained the heavenly world, Cyavana the Bhārgava or Cyavāna the Aṅgiras was left behind here (on earth) decrepit and ghostlike' (iv.1.5.1). The remaining groups are those of Viśvāmitra, and the Vasiṣṭhas. Before seeing what tradition has to say about these, let us consider for a moment the general nature of this tradition.

It is not the purpose of the Vedas to provide the reader with historical information, for they were purely liturgical works in language that soon became obscure, with changed interpretation of many terms. Possible historical references have to be gleaned with caution, for they are fortuitous, and the main question before any reader is not only what many of the hymns mean but even whether a given character is human, or a supernatural being. For example, Indra is the principal god of human type, and next to Agni the most important. Was he a human being later deified?[6] It would appear to be a reasonable guess, but when Indra's help to such and such a person is lauded, it generally remains an open question as to whether it was help given by the god in answer to a prayer, as for example the Homeric deities helping their favourite heroes on the field of battle, or whether an Aryan chieftain actually appeared upon the scene in person and took part in the fight.[7] In some cases, the divine interpretation is not in doubt, and whether Vṛtra was a real person (perhaps a Paṇi) or not, killing him as a demon of darkness ranks Indra with Ahuramazda, Ashur, Marduk and a long line of Tiamat-killers. But Indra's chariot, weapons, and killing of specific people leaves little doubt that in some cases at least, human actions are meant. One is sometimes tempted to equate *asura* with Assyrian. It would make better sense to regard the Asuras as human, if not Assyrians, at least in x.138.3, ii.30.4 and vii.99.5, for the interpretation that these Asuras were gods worshipped by the foe is quite unconvincing. Their traditional battle-cry *helayo helayaḥ*, reported by Patañjali as an example of barbarous speech, is still familiar and recognizable in 'Hallelujah.' As a general principle, however, we may note that the more remote the event, the greater the tendency to regard it as superhuman rather than human. This may be taken as a reasonably safe guide. Now one tradition which I shall utilize with special emphasis concerns king Sudās and his people. These are helped by Indra, and as the battles take place with 'ten kings' (by actual count of scattered references, nearer three times that number) in quite well-determined river valleys, we are safe in taking the reference as historical.

The second point is a matter of geography. There existed Aryans outside India, even in the oldest days, and there is no evidence for the hypothesis that all spread out from India, so that the Indo-Aryan tribes of the *Ṛgveda* must be taken as invaders. The god Viśvakarman of x.81, 82 has a great deal in common with extraneous deities like Ashur (perhaps himself explicit in x.31.6) or Ahura-mazda, being the only god with both arms and wings (x.81.3); the storm-gods, the Maruts, cannot be unconnected with the Kassite Maruttash. The general story is of an advance to the east, the *Drang nach Osten* being proved by the displacement of names such as the Sarasvatī, identified with the Hilmand, with a stream in Arachosia, and so progressively down to a stream in south-east Punjab which, for all Indic tradition, is the real Sarasvatī. This is unfortunate in one way, as some doubt is raised thereby whether the events connected with Sudās happened in India at all, for the story could have been transferred with the river names. The answer is that there is no reason to doubt the accounts which mention the Yamunā and the Gaṅgā but nothing further east. The wholesale transplantation of stories not known in any other Aryan tradition would be extraordinary. Also, we have ample archaeological evidence to the effect that before 1500 BC fully developed cities of a pre-Aryan civilization were destroyed by invaders, so that the fortified cities (*pura*) and fortresses (*durgā* v.34.7) destroyed by Indra have a definite existence.

There is ample evidence for the co-existence of more than one stream of tradition, even in the oldest sources. The first man is Manu in i.36, 19, but also Yama in x.135.1–2; and as the first mortal (voluntarily choosing death for the sake of posterity in x.13.4; in Iranian tradition, because one of his subjects violated a taboo against beef-eating), Yama is also lord of the dead. Both the name and the kingly function exercised by Yama seem to make this the proper Indo-Iranian tradition. There is a third candidate who appears very late, namely Puruṣa-Nārāyaṇa, mentioned only by the first part of the name in x.90, but with increasing prominence later on; this indicates that he belongs to an older tradition which is only later assimilated. He is the first sacrifice, but then Yama is both first sacrifice (x.13.4) and sacrificer, while Manu is also the first sacrificer (x.63.7); both Yama and Manu are sons of Vivasvat (x.17.1; viii.52.1) but both Manu and Puruṣa are autogenous. The etymology of Nārāyaṇa is later given as the god who dwells in the flood-waters (*nārā*), but the word, if Sanskrit, seems to mean merely 'son of man'. The similarity of particular details is due not to the unity of these clearly divergent representatives but to the need for adopting them to the Vedic, fire-sacrificing ritual and cults. Another candidate for seniority seems to have faded out of the picture. Tvaṣṭṛ makes images of the gods, and seems to have, in some such manner, power to make the gods behave accordingly. In ix.5.9, he is the first born, *agraja* and the adjective *agriya* i.13.10 gives him precedence; x.7.90 shows that he is peculiarly associated with the Aṅgirasas and fire. Indra cannot have been the original anthropomorphous chief god of the Vedic Aryans, for Varuṇa seems to have occupied that post and been superseded according to x.124, perhaps when the Indic Aryans took to a life of constant fighting and conquest as in the properly Vedic period. Possibly iv.42 also has this supersession of Varuṇa by the powerful war-god for its theme, and shows us in its later portion that apotheosis of a human warlord is possible, for king Trasadasyu is called a demi-god (*ardha-deva*) in iv.42.8–9.

The god Tvaṣṭṛ, whose name continues to mean carpenter (*AV.* xii.3.33; *Amarakośa* 2.10.9; 3.3.35), reappears in various minor ways in Vedic mythology, either directly or through his 'son'. Viśvakarman in x.81.3 has eyes, faces, arms in every direction—characteristic of the later Brahmā; he created or rather fabricated heaven and earth: *niṣṭatakṣuh* (x.81.4), but the root *takṣ-tvakṣ* is also responsible for Tvaṣṭṛ. It will be shown from analysis of Iranian legend that a many headed god like Viśvakarman should be Vācaspati, as in x.82.7. The speech-goddess *vāc* being primarily the river Sarasvatī and in any case a water-goddes (x.125.7), other connections between rivers, many-headed gods, and Tvaṣṭṛ will, not surprisingly, appear. In x.82.3, 5, 6 Viśvakarman is specially connected with the embryo of the universe (cf. v.42.13); Tvaṣṭṛ is always fashioner and protector of all embryos, divine, human, or animal. It is pecularly interesting to learn from x.17.1–2 that Tvaṣṭṛ's daughter Saraṇyu (= 'the flowing', hence a river-deity) was married to Vivasvat, giving birth to Yama-Yamī; after her flight, her double became mother of the Aśvins who relieve so many priests in distress. Viśvakarman is both creator and destroyer (*dhātā* and *vidhātā* appear as weaving women, like the Norns, in *Mbh.* 1.3.172); the funerary hymn x.18.5–6 specially calls upon Tvaṣṭṛ to protect the living, though the end of the hymn sends the dead man to his fathers and Yama. The reason for Tvaṣṭṛ's being invoked appears in x.18.10–11 in which burial is first described as return to the earth-mother's womb. Thus we have the combination of two entirely different rituals and a succession of Yama to Tvaṣṭṛ-Viśvakarman, apparently by mother-right. Therefore Tvaṣṭṛ is not originally an Aryan god like Varuṇa, pushed into the background by Indra and the fighting life, but rather a cult figure from the pre-Aryan background, adopted at various times under different names which are Sanskrit adjectives. The faint similarity between Varuṇa's supersession and Tvaṣṭṛ's was utilized in ancient times: in x.124.5–7, Varuṇa is virtually supporter of Vṛtra against Indra (taking the obvious rather than the Sāyaṇa meaning); in iv.42.3, Varuṇa even proclaims himself Tvaṣṭṛ, perhaps in the adjectival sense, but in any case unique. These are clearly attempts at assimilation. The Ṛbhus who quadruplicate Tvaṣṭṛ's wooden cup (i.206; iv.33.5–6) seem to be purely Aryan craftsman-gods of limited aspect. A carpenter-god implies the existence and relative importance of craftsmen among his worshippers. We know that carpenters would be important when chariots and heavy wagons (*anas*) were; also that some indigenous craftsmen were far superior to those of the invaders. It would then seem that Tvaṣṭṛ first enters the pantheon as a god brought in by the pre-Aryan craftsmen. But this does not necessarily mean that he was only a craftsman-god among the pre-Aryans.

In the south, to this day, Tvaṣṭṛ is worshipped under the name of Viśvakarman by the few surviving image-makers of the old school. They form a caste (*sthapatis*) by themselves, and still claim the right of wearing the sacred thread. In view of all this, it might be considered ridiculous to propound the view that Tvaṣṭṛ is borrowed or adopted from the pre-Aryans. Let me, therefore, point to Sāyaṇa's gloss on the word *bṛsaya* which is either a name or means wizard. On i.93.4, the commentator says '*bṛsayo'surās tvaṣṭā,*' though the supposed, Asura is here connected with the Paṇis by the text of the *ṛk*. On vi.61.2, commenting upon *viśvasya bṛsayasya māyinaḥ*, Sāyaṇa again says, '*Bṛsaya iti Tvaṣṭur nāma-dheyam*'. Now Tvaṣṭṛ having a clear position among the gods, to the extent of being included in every *āprī*-hymn, to call him an Asura Bṛsaya would have required great courage on the part of a devout fourteenth century commentator,[8] unless there had been a very clear tradition to that effect which could not be contested. As will be seen, we should have been driven to this conclusion even without the added help of Sāyaṇa's report.

There is a possible (but insufficient) materialist explanation for the decay of Tvaṣṭṛ, namely the changing social relationships within Aryan society, due precisely to the conquest. The craftsman-god has much less honour than the war-leader god, as would be natural. With this we also get the greater urgency of ritual and a differentiation, then barely visible, between the functions of priest and king (iv.50.7–11). There is the corresponding rise of an altogether new god (of prayer or of the sacrifice) Bṛhaspati, who has varying degrees of respect, from a trifling mention in the Viśvāmitra book (iii.20.5; iii.26.2 = *agni*; iii.62.4–6, but this is a Jamadagni hymn in all probability), to having entire hymns dedicated to him in the properly Brahmanical books, as ii.23 to ii.26.

The last note is about the structure of Vedic society. The caste system is peculiarly Indian, yet the four castes are mentioned in just one *Ṛgvedic* hymn (x.90) the famous *Puruṣasūkta*, quite obviously a later addition duplicated in the last of the Vedas, the *Atharva-veda*. The four-caste system is mentioned nowhere else in the *Ṛgveda*, nor are the two lower castes, Śūdra and Vaiśya. Brāhmaṇa in the sense of one belonging to the priesthood, with the special function of speech, is rare occurring only in the newest layer (vii.103; x.16.6; 71.8–9; 88.19; 90.12; 97.22; 109.4). Kṣatra in the sense of the rulers or rule, and Kṣatriya do occur both of gods and men; but the book need not emphasize this, seeing that there is no competition. There can be no question of *purohita-gotras* exclusively, for the priesthood is not the exclusive prerogative of one caste; in ii.1.2. = x.91.10, *brahman is actually separated from all other priests.* Even later, we have ample proof that the Kṣatriya could officiate at the sacrifice, for all that the Brahmanical scriptures enjoin is that he should not officiate at the sacrifices of others as do the Brahmins; nothing prevents him from officiating at his own *yajña*. Even here, we find the story of Devāpi (*Bṛhaddevatā* vii.155, viii.10 on *RV.* x.98–101) who did so officiate at the ceremonies for his crowned younger brother Śaṃtanu. This is of some importance for us in the bearing it has on the caste system at its oldest stage, and its relation with the *gotras*.

Viśvāmitra and Vasiṣtha

6. If we assume that all Brahmins were Aryans from the first, and that they were the priesthood which developed entirely from within, there is very little that analysis can tell us except that our legends are meaningless. But if we make no such hypothesis, then the most instructive tradition is that of the rivalry between Vasiṣtha and Viśvāmitra. Later tradition has Viśvāmitra a Kṣatriya who did his best to become a Brahmin in jealousy of Vasiṣtha, and succeeded. The tradition is uniform that he was originally not a Brahmin but a ruler and member of the warrior caste, a *rājarṣi*, though there is no mention in most of the oldest records[9] of his actually having been a king. It does not need detailed reference to the *Ṛgveda* to prove that the Viśvāmitras are themselves Kuśikas (iii.33.5, iii.53.9–11, etc.). But the *Anukramaṇī* calls the third book that of Viśvāmitra, not of the Kuśikas, as it should clearly have been denoted; in conformity with this Brahmanical method of labelling the entire clan after one great representative, we get in our later *gotra* lists the Kuśikas (owl-totem) generally indicated as a branch of the Viśvāmitras, which is again a characteristic inversion deriving from the adoption of a foreign system whose totemic basis had been forgotten, the clan system. As for the original position of the Kuśikas, it might be recalled that Indra is invoked as *kauśika* in i.10.11, and this seems unique among the 'Brahmin' clans as far as known, for *aṅgirastamas* in i.130.3 and *vasiṣtha* in ii.36.1 are direct adjectives, not patronymics. The Brahminization, in its surviving form, of the Viśvāmitra book may even be attributed to the Jamadagni influence so clearly visible therein. The Vasiṣthas have a special claim to priority in the priesthood, for the tradition is uncontradicted that they *first of all the Brahmins* 'saw' Indra and began to worship him, whence they have first place at the fire-sacrifice. (*Bṛhaddevatā* v.156–9; *Tait. Saṃ.* iii.5.2).

We are rather fortunately placed as regards this legend, for the *Ṛgveda* has preserved for us books of both families. Both are priests in the service of king Sudās, who could himself exercise priestly functions, being the reputed author of x.133. The senior priest is Viśvāmitra, the eponym standing for the entire group; the *gotra* name, as has been shown, is really *kuśika* = the owl, a good bird totem. A famous hymn is iii.33, by Viśvāmitra to the two Punjab rivers Vipāś and Śutudru which he crosses with heavily loaded wagons of the Bharata tribe. This is apparently referred to in iii.53.9 and 11, where Sudās as the king is made to cross safely by Viśvāmitra, while iii.53.12 calls down a blessing of Viśvāmitra upon this tribe of the Bharatas. The implication is that Sudās and Viśvāmitra are Bharatas. This seems to be partially confirmed by vi.16.19, where the ancestral fire of the Bharatas is called the lord of Divodāsa, which is the name of Sudās's father or paternal ancestor.

But the Vasiṣthas also claim to be the priests of Sudās, in their own book, and there is ample support for this. This disposes of the fiction that the *gotra* of a Kṣatriya is that of his priest, for it would follow that Sudās Paijavana changed *gotras* or had more than one! We have to examine the question of priority between these two clans which occupy the priesthood in succession for the same people. Here for once we have unequivocal testimony: 'Like sticks used to drive oxen were the Bharatas split and enfeebled (= *arbhakāsas*; according to Sāyaṇa, 'with few children'); then Vasiṣṭha became their chief priest (*purohita*) and from the Tṛtsus developed progeny (*viśas*)' (vii.33.6). The statement is perfectly clear, and the special Vasiṣṭha prayer for issue is to be seen in vii.4.7–8. Our verse above means that the Tṛtsus were a branch of the Bharatas—though the name is taken by some as synonymous for all the Bharatas, which looks unlikely unless it is from some other language. Vasiṣṭha was not originally their priest, but he *became* the *purohita* at some later stage, and then the tribe multiplied. Actually, in vii.33.10–11 Vasiṣṭha derives his origin from Mitra-Varuṇa[10] and the very next verse from an apsaras,[11] both of which mysterious legends have been amplified later. This, with the absence of an animal or tree totem, would strengthen the implication that Vasiṣṭha (whose name is merely an adjective proclaiming his superlative glory) was not as other Aryan men.[12] On the other hand, he cannot be taken as a divine being because he is actually the priest of a decaying clan, and vii.18, which describes the victories of Sudās over many hostile kings, ends with a description of the gifts to Vasiṣṭha; these gifts would be uncalled for if some of the victories were not due to a Vasiṣṭha's incantations. The first battle (vii.18.5–8) is on the Paruṣṇī, but there is at least one other in vii.18.19, on the Yamunā. This virtually spans the whole of greater Punjab, if the Yamunā is to be understood as the modern river of that name (though it has been suggested that the name, indicating merely the 'twin river', might again denote the Paruṣṇī; but x.75.5 which has the only *Ṛgvedic* mention of the Gaṅgā seems clear for our interpretation). Now we have noted that the general movement is to the east, specifically proved in this case by Patañjali's remark that the adjective 'eastern' for Bharatas is superfluous, as there aren't any Bharatas except in the east: *bharata-viśeṣaṇam prāg grahaṇam anarthakam, na hy aprāñco bharatāḥ santi* (commenting on Pāṇ. 2.4.66; later commentators take Auddālaki as an example of a Bharata). Whence Viśvāmitra's passage of the Beas and the Sutlej must be an earlier event, and the priority of Viśvāmitra is therefore not in doubt. The inversion consists in that Viśvāmitra is made the upstart by later Brahmanical tradition in direct contradiction to the clear historical development.

If Vasiṣtha and Viśvāmitra were both Brahmins as the term is understood by later writers, and the Aryan priesthood confined to the Brahmin caste, the logical development would have been the adoption of Vasiṣtha into the Viśvāmitra or Kuśika *gotra*. The story of Śunaḥśepa (*Ait. Brāh.* vii.13–18; the names of the three brothers are a suspicious feature) does show such adoption, even of one chosen as sacrificial victim (cf. v.2.7; i.24.12–13). Indeed this adoption with the changed name of Devarāta[13] is made responsible for the double marriage restrictions upon the Devarāta *gotra* though contrary to the accepted results of adoption in tribal society. Even to this day, Brahmanical marriage restrictions are circumvented by adoption into some other *gotra*, which also forfeits inheritance rights. But Vasiṣtha is emphatically called the first Brahmin priest, whence Brahminism is foreign to the original Aryan system. It sufficed, therefore, that Vasiṣtha be adopted into the tribe, not necessarily into the gens of the original tribal priest, Viśvāmitra. It follows that Viśvāmitra, though a priest, is originally not a Brahmin; this is attested by his title of *rājarṣi*, applied also to several other Kṣatriya priests, as for example the five (supposed) authors of i.100, the three of x.179.

While references to Sudās and his victories are scattered throughout the *Ṛgveda* (though with highest frequency by Vasiṣtha), the name Tṛtsu occurs nowhere outside the seventh book. There is a faint possibility that the whole of the Tṛtsu group (including ancestors of Sudās) was adopted into, and not a splinter of the Bharatas; but there is no clan name now extant which can be derived from Tṛtsu. The adoption seems at least to have been that of Vasiṣtha and went to the extent of a common style in hairdressing; vii.33 begins by describing the Vasiṣthas as *dakṣiṇatas-kapardinas*, with hairtwist on the right side, and *kapardin* is used only of the Tṛtsus (vii.83.8) in describing human beings. The actual practice survived late, as we see from the appendix to the *Gobhila Gṛhya-sūtra*:[14] 'The Vasiṣṭhas have a hairtwist (or braid) on the right, the Atreyas have three twists, the Aṅgirasas five scalp-locks, the Bhṛgus have completely shaven heads, and the others wear a crest.' This is to differentiate between *gotra*-groups, and 'the others' here are the Viśvāmitras and possibly the Kaṇvas, so far as the main *Ṛgvedic* families go.

The Death of a Priest: Tvāṣṭra

7. The rivalry between the Viśvāmitras and the upstart Vasiṣṭhas is plentifully attested in later tradition, while iii.53.21–4 are stanzas which still pass as curses against the Vasiṣṭhas, so strong that were one of them to hear the particular verses, his head would split into a hundred pieces (they are still capable of giving anyone a headache!). On closer reading, these stanzas actually do seem to be a mixture of curse and lament that the Bharatas are beginning to prefer strangers to their own, the ass to the horse; there is no reason to doubt that they reflect the displacement of the Kuśikas by the Vasiṣṭhas. We are told (*Bṛhaddevatā* v.112–20) that Viśvāmitra was deprived of his senses by Vasiṣṭha and speech (*vāk sasarparī*) had to be supplied by Jamadagni. The brief hymn x.167 to Indra is given joint authorship of Viśvāmitra and Jamadagni, which supports this close association. It follows that here Jamadagni is not on the same side as Vasiṣṭha and their separate rivalry is attested by *Tait. Saṃ.* iii.1.7; v.4.11. Later tradition makes Jamadagni a sage at once hot tempered and forbearing; capable of stopping the sun yet killed unresisting by Kṣatriyas; in revenge his son Paraśurāma completely wipes out all Kṣatriyas from the face of the earth thrice seven times—though the Vedas have nothing of all this (Jamadagnya being merely the supposed author of x.110). This is one more of the inversions, with passage of time and rise of the Brahmins: it was the Kṣatriya who did the killing, and not conversely. In fact, even the Vasiṣṭhas are supposed not to have escaped unscathed, for the *Bṛhaddevatā* vi.28, 33.4 reports, 'Now in the fifteenth and in the eighth (stanza) of the hymn (*RV.* vii.104) the son of Varuṇa (Vasiṣṭha), while as it were lamenting, his soul being overwhelmed with pain and grief, utters a curse. Vasiṣṭha was at that time pained as his hundred sons had been slain by Sudāsa who, in consequence of a curse, had been transformed into a demon (*rakṣas*). Such is the sacred tradition.' Again, the *Ṛgveda* does not report this but the *Tait. Saṃ.* vii.4.7 does; such a tradition in the face of all the favour supposedly shown Vasiṣṭha by Sudās cannot be devoid of truth.[15] I suggest that *some* Vasiṣṭhas were so killed, perhaps some of those not regularly adopted into the

Tṛtsus. Killing the priest or his son is a fashion set by Indra himself in beheading Viśvarūpa Tvāṣṭra, whose three heads he (or his double Trita, ii.11.19; x.8.8–9) struck off. This counts as a sin only in far later times, while we still have the Tvāṣṭreya *gotra* (*GPN*. 156–18) among the Jamadagnis. The three heads of Tvāṣṭra became varieties of partridge (*Bṛhaddevatā* vi.151) and two of these bird totems certainly remain in the *gotra* lists, namely Tittiri and Kapiñjala, though neither is among the Jamadagnis proper. For that matter the demon Rāvaṇa, the warrior villain of the *Rāmāyaṇa* in later and more eastern legend, counts also as a Brahmin, and surprisingly enough the *gotra* is found in the Vasiṣṭha group (*GPN*. 113.11, 177. 22,177.1) though Vasiṣṭha is traditionally the chief teacher of Rāma! Even the mild Atris did not escape as is seen by Saptavadhri's prayer for release from imprisonment (v.78.5–6) and by x.143.1–3, i.117.3, x.39.9, perhaps referring to Atri's release from a fiery pit.

The lasso as a weapon of war is used by the Sagartian contingent of Xerxes's cavalry (Herodotos vii.84), and by individual heroes in the Shah Nameh. This may be the original *pāśa* from which freedom is desired, perhaps symbolically, in several hymns. The gloss ascribes viii.67 to fishes caught in a net and praying for freedom, which could have been dismissed as a myth had it not been for the fact that the Matsya tribe appears in vii.18; and in the *Mahābhārata* as the people of king Virāṭa. The Vaphio gold cups show us nets being used to catch wild bulls while the god Ningirsu is shown on Eannantums' stela (stèle des vautours, in the Louvre) enfolding the men of Umma in a net and crushing those who try to escape, whence its use for prisoners[16] of war is also possible.

The *Taittirīya Saṃhitā* (ii.5.1, after Keith) says: 'Viśvarūpa, son of Tvaṣṭṛ, was the domestic priest of the gods, and the sister's son of the Asuras. He had three heads, of which one drank *soma*, one *surā*, and one which ate food. He promised openly the share to gods, secretly to the Asuras. Therefore Indra was afraid, (thinking) "such a one is diverting the sovereignty (from me)". He took his weapon and smote off his heads. That which drank Soma became a hazelcock (*kapiñjala*); that which drank surā a sparrow (*kalaviṅka*) that which ate food a partridge (*tittiri*; note the name of the *Saṃhitā* itself). He (= Indra) seized with his hands the guilt of slaying him (= Tvāṣṭra) and bore it for a year. Creatures called out upon him "Brahmin-slayer"...' The *Yajurveda* proceeds to list the evils and taboos which arose when Indra's sin was partaken by others. It also says that Vṛtra was created by Tvaṣṭṛ to avenge his son's murder; later tradition has it that the plan miscarried because of a misplaced accent, whereby Vṛtra was killed by Indra instead of becoming Indra-killer. I wish to emphasize that, in general, legends of the gods represent some aspect of human class-relations whenever a complex social structure arises out of the amalgamation of different cultures. Now the *Taittirīya Saṃhitā* existed before the sixth century BC, while its components, including the story above, are much older. In asking ourselves just what the story does represent, the main features have to be considered, namely: Tvāṣṭra has three heads (of which we have noted the gentilic nature of at least two); he is a Brahmin, so that killing him is a sin here—though a creditable performance in other reports; his mother is, nevertheless, a sister of the Asuras, whence Tvāṣṭra is an Asura in the matriarchal sense; Indra maintains his sovereignty by the craft of this not properly Aryan priest. I hope to prove in the sequel that the story has a basis in ancient history, as seen from recorded tradition and archaeological finds. Its incorporation into Vedic mythology does show a progressive change of emphasis, but the story itself cannot be wholly explained by mere internal development of antagonism between king and priest. The most likely interpretation, accounting both for the apparently historical features as well as the development of castes, is that the original Vedic priesthood was expanded and transformed by absorption of very important pre-Aryan elements.

It is easy enough to show that this enmity between the Brāhmaṇa and the Kṣatriya is not merely a later growth with the increasing power of the priesthood; in fact such increase of power, till we come to Kāṇvāyanas, is only in theory, naturally propagated by the unarmed and helpless Brahmins themselves.

The analogy of European struggles between the Papacy and the secular power cannot possibly apply till long after the early Vedic period, certainly not before the Mauryans; even here note must be made of the fact that Hinduism never developed an established church, and that the Brahmin caste began to serve the general population by ritual, rather than the warrior class by *yajña*, only after the rise of Buddhism. In the earliest days (as in Rome and Greece), it was the right as well as the duty of every head of a patriarchal family to perform priestly functions later reserved for Brahmins; and knowledge of Vedic Sanskrit was common without the prolonged study it necessitated later. If, under such circumstances, we find the beginning at least of endogamous castes, it is necessary to inquire what *external* forces would lead to and accelerate this type of partition. The major feature is the conquest; it will be shown that this does account for the Śūdra caste. But it is difficult to believe that no other portion of the conquered population survived besides the helots; that we should nevertheless find the reappearance of Indus Valley motifs, including multiple-headed and many-armed deities—particularly Brahmā. That cities like Mohenjo-Daro could exist without class divisions is quite incredible in view of what is known of ancient society, and if their armament does not appear from known excavations (which are certainly incomplete) to have been very good, it implies the existence of some other method than pure force for maintaining the class division. This method, so far as known, can only be religion, and that in turn implies the existence of a strong, fully-developed, and well-organized priesthood. I may point out in this connection the importance of the desert bordering the river (as in Egypt and Mesopotamia) for this not only makes the development of agriculture, and later of the city-state, possible as well as necessary, but also economizes the energy spent upon defence against wild animals, barbarians, and in cutting down forests. The intervening desert is an excellent natural barrier against external enemies till they learn the advanced military technique necessary for crossing it and taking walled cities. The need for internal force is minimized by the priesthood. After the Aryan conquest, nothing would be easier than the absorption of some upper layers of the conquered society, and the most attractive would be the priesthood, even more important than the technicians in any primitive society. Of course, this would greatly intensify the development of classes among the conquerors as soon as they began to settle down; which is precisely what we find on comparing the *Ṛgveda* with the *Taittirīya Saṃhitā* and later documents. As further support, I might point out that a considerable number of ancient stories appear rather late, albeit with claim to antiquity—as for example the flood legends and the *Purāṇas* in general, though some of the material is undoubtedly pre-Aryan.

In this direction, it is necessary to remark that matriarchy survives only among the least Aryanized of the people found in India today. If the conquered had even a remnant of this system, it would be easy for them to preserve their group structure for a while after adoption into various patriarchal gentes. Thus we should not be surprised at finding Dīrghatamas called Māmateya after his mother, a custom to be observed in the final *Bṛhadāraṇyaka Upaniṣad* line of teachers.

One sign of conflict between the Brahmin and Kṣatriya castes, after full development of the system appears in the original meaning of x.109, which seems to have been composed for the return of a Brahmin's wife abducted by a Kṣatriya. One obvious reason for the later appearance of the Jamadagnis and the still later rise to pre-eminence of Bhṛgu is this previous enmity. These people were still being killed by the Kṣatriyas when the Viśvāmitras were being ousted by the Vasiṣṭhas from the Bharatan priesthood. The objection will undoubtedly be made that the later Brahmins could have been Aryans from some extra-Vedic branch. Why could the Jamadagnis, with their Indo-European name, not have been Vrātyas? In the first place, the Vrātyas were first differentiated from the rest long after the Bhṛgu-Jamadagni group was well established (though not necessarily in all parts of the country) and the Vedas fully developed. In the *Ṛgvedic* age, the term vrātya could not have been used to distinguish extra-Vedic Aryans because all Aryans were then wanderers while the development of the Vedas itself reflects the rise of settlements. The Vrātya tribes do not need the Vedas simply because they continue to wander eastwards, into territory without a great civilization comparable with that of the Indus valley. At that later stage when the Vrātyas proper have to be distinguished, the adoption of their priests would not only be unnecessary but highly improbable for the simple reason that their priesthood—if indeed it had a separate existence—would be much less developed than that of the main Vedic Aryans. This can be seen from the *vrātyastoma* ritual, created later for the adoption of a Vrātya, not of his priest, into the Vedic fold; from book xv of the *Atharva-veda*, which seems written to placate the Vrātyas; from the term *brahmabandhu*, applied to Magadhan Brahmins who associated themselves with the Vrātya ceremonies, and even now used of Brahmins[17] without learning. The great Vrātya tribe is that of the Licchavis, mentioned with respect by the Jains, and the earliest Buddhists, while maintaining a high social position down to the Gupta period at least. We have yet to hear anything of their priesthood. The philological argument from the name carries less force now that Hittite records have been read; also, adoption being a form of rebirth, a non-Aryan name would be the first to change. Even without adoption, conquest favours a new style in names, as seen from Greek names adopted by Jews. Proponents of the 'extra-Vedic Aryans' theory would have to postulate rather complicated relationships between groups of Aryans not known to have existed; at the same time, the recurrence of Indus Valley types in later iconography would be very difficult to explain.

Adopted Priests

8. Looking closely at the first list of Sudās's enemies in vii.18.5–7, we find the following:[18] Śimyu, Turvaśa, Yakṣu, Matsya, Druhyu, Bhṛgu,

Paktha, Bhalāna, Viṣāṇin, Alina (and perhaps The Śivas); in vii.83.7, the ten kings opposing Sudās are called *ayajyavaḥ*, 'without the fire sacrifice.' The notable occurrence here is of the Bhṛgus, who cannot then have been merely Brahmin priests. This is to some extent supported by the surviving designation *bhārgava* (? 'the roaster') for a potter, which is quite natural if fire were the particular technique of the Bhṛgus, as it appears to be in the *Ṛgveda*. Their chariot receives special mention in iv.16.20 and x.39.14 by the phrase *bhṛgavo na ratham*. Hence, they are a complete tribe, with all the professions. If their name survives only as that of a Brahmin *gotra*, it must be because some of them managed to become priests of the Aryans. That they were not always Aryans themselves would follow from vii.18.7, which specifically mentions Indra, as the friend of the Aryans, bringing aid to the other side. That the Indus valley culture could exist without strong class difference is incredible, and their priest class must have had specially refined ceremonial, which would enable them to be adopted fairly easily into the priesthood of the conquerors, provided they took up the new cults.

It is quite simple now to show that there are other elements besides the Bhṛgus which are so assimilated. Kutsa, for example, counts as a Bharadvāja *gotra* with Kautsa (*GPN*. 63.14, 165.21, 61.4); it is therefore natural to find Kutsa the author of i.94–8. But in the body of the Veda we read conflicting stories about him, for he is at times favoured by Indra and at times crushed; the first may be seen in x.49.4 and the second in i.53.10. This can be explained by our present thesis of progressive assimilation of a Kutsa tribe. The Pūrus[19] are mentioned in i.108 with the Yadus, Turvaśas, Druhyus, Anus, all originally hostile to Indra and the Aryans. The particular portion of the hymn is undoubtedly late; but it is to be noted that Yadu, Turvaśa, Anu, Druhyu, Pūru are all five made sons of king Yayāti (the first two by Devayānī, a Brahmin (Bhṛgu) daughter of Śukra, preceptor to the Asuras) in later legend (*Mbh.* 1.78.9–10). Kṛṣṇa (= black), the incarnate god of the *Mahābhārata*, is himself a Yadu. A Kaṇva named Kṛṣṇa is the poet of viii.85, a hymn addressed to the Aśvins. It is notable that the seer is called 'black' by name, like the Aṅgiras author of x.42–4; in the *Atharva-veda* ii.25, *kaṇva* means 'evil spirit', to be exorcised. It would be simplest to regard this not as a fortuitous coincidence, but as indicative of some Kaṇvas having been adopted from the dark pre-Aryans, of whom the unadopted portion was submitted to the usual process of demonization with the passage of time. Just when these five people became Aryans is not clear, but certainly the brave king Pōros defeated by Alexander in his invasion of the Indus valley is (with his nephew) the last Paurava known to history, so that some of these ancient lineages actually existed down to a late period, and had to be explained by a suitably rewritten tradition. This tradition never disguises the hostility between the dark (hence un-Aryan) Kṛṣṇa and Indra, which seems to go back to viii.96.14, 19 (accepting the reasonable Sāyaṇa gloss). We even get the Purukutsa combination as a king-name, probably the representative of an amalgamated tribe; in our Brahmin *gotra* lists the name is found among the Bharadvājas (*GPN*. 61.14), which would be impossible except on our hypothesis. In fact, references in book vi. make it clear that some Bharadvājas were priests of Purukutsa's son, hence the formation of that *gotra* among the Bharadvājas. The descendant Kuruśravaṇa embodies the first mention of the Kurus, in his name (x.32.9; 33.4).

When we come to *kevala* groups, the origin of the inverted rule that the priest's *gotra* is that of the king becomes still clearer. Vītahavya is a Bhārgava *gotra* (*GPN*. 34.4–5) but the Sṛñjaya Vaitahavyas of *Atharvaveda* v.18–19 are rude Kṣatriyas who slaughter Bhṛgu's cow; the sage is helpless and the cow herself takes revenge upon the insolent warriors, who are destroyed. But this would leave the *gotra* and *pravara* unexplained, so we have a still later story to round out the narrative, that Bhṛgu magnanimously and magically converted the refugee Vītahavya into a Brahmin merely by telling his pursuers that there was no Kṣatriya in the hermitage. Vītahavya as an adjective is applied to Sudās in vii.18.3, presumably in the sense of he whose libations are agreeable to the gods; the name occurs as that of the author of vi.15, and explicitly in vi.15.3 calling down blessings upon him. But the sixth book is of the Bharadvājas, whence we again have a contradiction. This may be resolved by the explanation that *some* Sṛñjaya Vaitahavyas, not necessarily connected with the singer of vi.15, had a Bhṛgu as their family priest. But inasmuch as the Kṣatriya was not by any means excluded from the priesthood, properly the function of any tribal leader or family head, those Bhṛguids who survived in this particular line had to be adopted by tribal rule into the Vītahavyas, whence by the later antithetic inversion we get the formation of a Vītahavya *pravara* among the Bhṛgus. This process is very clear among the ten extra families enrolled among the Bhṛgus and Aṅgirasas, as shown by the king-names that form the supposedly Brahmin *pravaras*. It will be fairly obvious that, at least as regards these special *kevala* families, the *pravara* develops by adoption by some Brahmin group of a Kṣatriya family name. Mudgala is a Kevala-Aṅgiras group in the lists, but the

Mudgala of x.102 is a splendid fighter. Though not in the Veda, the *Purāṇas* make Viṣṇuvṛddha son of Trasadasyu, hence a Kṣatriya, though the name is in the Brahmin *pravara* lists. The Vena of x.93.14 seems to be a non-Aryan king.

With the exception of people within the tribe or cult, as in the case of Indra himself or Sudās, *Ṛgvedic* names of a tribe and its leader seem to be identical, particularly in speaking of people not intimately known to the hymn-singer. This agrees with what we know of tribal society in other places. The MacDonald would be the head of the clan MacDonald in Scotland. Not less than ten different leaders named Appius Claudius headed theClaudian gens in Rome after its incorporation under the first Sabine head (Attius Clausus); if Latin records were as diffuse as the Sanskrit, the deeds of all of them would have been inextricably confounded. The distinction between heads of families and ordinary members appears in Pāṇini's grammar (see J. Brough, loc. cit., for the significance of the *yuvan*). *Vd.* xii.7 shows that the period of mourning among the Iranians for the head of a family was six times that even for a parent. For my purpose, the designation of whole clans by a single ṛṣi's name (for one Viśvāmitra or Vasiṣṭha can hardly have composed the entire books in their respective names) yields further support for the adoption theory. What needs careful proof is the statement that some of these adopted priests must have belonged to pre-Aryan Indian groups.

The distinction between Brahmin and Kṣatriya priestly traditions even after their merger may be seen in the position of Viṣṇu, who is a very minor god in the Viśvāmitra book.[20] But three complete hymns to Viṣṇu by Dīrghatamas (i.154–6) show a totally changed relative emphasis. The sage himself, according to the *Bṛhaddevatā* iv.11–30, was the blind son of a Bhṛgu mother and in his old age cast into the river which carried him safely eastwards beyond the Aryan pale to Aṅgā.

Pre-Aryans and Archaeology

9. It is still necessary to show that some of these new recruits to the Vedic fold were non-Aryans,[21] for there is no doubt that there did exist non-Vedic Aryans; among the Indians, it sufficed to refer to the *vrātya* Licchavis. So, it might be suggested that the whole fight with Sudās's enemies was in fact a civil war among Aryans (as in part it must have been), that the hostility which can so amply be proved down to later times is professional, between the warrior and priestly castes, and at most derives from the ancient hostility among different Aryans tribes. After all, Kuruṅga is called a Turvaśa king in his *dānastuti* by Kaṇva, viii.4.19, and

could be an Aryan; more ambiguously, Kaṇva begs Indra to let him see Yadu-Turvaśa again in *ṛk* 7. Not only in vii.83.1, but also in other hymns (vi.33.3, vi.22.10, vi.60.6) are both Aryan and non-Aryan (called Vṛtras here) enemies mentioned when praying to Vedic gods for protection. In iv.30.7, Indra takes Yadu and Turvaśa across dry (or unbathed; the meaning is obscure) but kills two (presumably non Vedic) Aryans Arṇa and Citraratha on the other side. There is, then, evidence for the progressive recombination of Aryans and non-Aryans into Vedic and extra-Vedic groups. In vii.83.1, Indra-Varuṇa are to stand by Sudās and strike enemies, both Aryans and Vṛtras. But our point is easily proved.

Tura Kāvaṣeya is a famous teacher in the *Śatapatha Brāhmaṇa*, a leading priest in the *Aitareya Brāhmaṇa*, and prominent in other Brahmin tradition, though the direct gotra does not seem to have survived. But his father, Kavaṣa Ailūṣa (seer of x.30–4 and priest of Kuruśravaṇa, x.30) is forcibly ejected as *dāsyāḥ putraḥ*[22] by Brahmins, to die of thirst from which he is saved by his river hymn (x.30, because of which the sacred river Sarasvatī followed him into the desert; cf. *Ait. Brāh.* ii. 19). The ancestral representative Kavaṣa is overthrown in vii.18.12 along with the Druhyus, which should complete the story. But it might still be objected that *dāsī* means only a slave girl, and there is nothing to show difference of race, even though a slave girl's son would certainly be disqualified.

Dāsa in the greater number of *Ṛgvedic* citations means a human foe conquered by the Aryans in battle, *Indra yathāvaśam nayati dāsam āryaḥ* (v.34.6 and others). They have their own cities, strong enough to be called brazen or iron; (ii.20.8) *hatvī dasyūn pura āyasīr ni tārīt*. Dasyu is taken as synonymous at times with demons, and again with *dāsa*, which shows that the strife is very old: (iii.12.6) *Indrāgnī navatiṃ puro dāsapatnīr adhūnutam*. Some of these cities are seasonal, particularly autumnal (*śāradīḥ*): *sapta yat puraḥ śarma śāradīr dard han dāsīḥ Purukutsāya śikṣan* (vi.20.10) which incidentally show that Purukutsa was befriended by Indra at that time, whatever the components of his name may have been earlier. They have a special colour *yo dāsaṃ varṇam* (ii.12.4) which is not that of the Aryans: *hatvī dasyūn prāryaṃ varṇam āvat* (iii.34.9). They are always different in religion (cf. *Manusmṛti* x.44, 45), which is of far greater importance than the colour. They have not the fire-sacrifice: *ayajvānaḥ* (i.33.4), nor the proper cult and are possessed of black magic: *māyāvān abrahmā dasyur arta* (iv.16.9), besides being black and possessed of cities: (iv.16.13) *pañcāśat kṛṣṇa ni vapaḥ sahasrā atkaṃ na puro jarimā vi dardaḥ*. They are treacherous, without the Aryan observances, and hardly human (x.22.8): *akarmā dasyur abhi no amantur* *anyavrato amānuṣaḥ; tvaṃ tasyāmitrahan vadhar dāsasya dambhaya.* Just what the designation *anāsas* ('noseless' or 'faceless'?) applied to them in v.29.10 means is not clear, but it surely refers to their different appearance.

Only in three cases does *dāsa* clearly mean a servant or slave, an early reference to the helotage to which a great part of the subjected people sank. Of these, x.62.10 referring to gifts made by Yadu and Turva to the bard mentions either two slaves or portrays the humility of the donors, but the names as well as the reference being part of the *dānastuti* may indicate a later addition. The reference viii.56.3 in a Vālakhilya can be ignored. In vii.86.7, the seer speaks of serving the god like a *dāsa*, which can only mean slave or servant, not enemy. The rare mention shows that the new relation was emergent, not fully established. Therefore, we are led to wonder whether Divodāsa means 'slave of heaven', or whether the period is early enough for the name to indicate a *dāsa* who had been adopted by the other side. I myself incline to the latter interpretation, seeing that *dāsa* has generally the meaning of a specific people from whom the Śūdra caste and servitude developed by conquest. In any case, the termination *dāsa* as part of a name is not to be seen elsewhere than with Divodāsa (and in later orthography his son 'Paijavana' Sudās). Trasadasyu (son of Purukutsa) does not seem to mean the Dasyu named Trasa, but he who makes the Dasyus tremble.

The concept of tribal property in a migratory pastoral society enables us to sketch an outline of development for the Śūdra caste. The Indus valley city dwellers could not have been fed without a comparatively large ancillary agrarian population. The invaders' way of life made such prisoners useless at first, for without agriculture a human being could produce very little surplus beyond that needed for his own maintenance. A prisoner would be sacrificed or adopted, as the Śunaḥśepa story tells us. If the agrarian population of the Indus valley had been effective as fighters, the conquest would not have taken place, or at least not been so devastating. They must have been too numerous to adopt en masse, but not dangerous enough to be killed off altogether. Thus the survivors would form a group by themselves and whatever they could produce by their own methods, as well as their labour, would belong to the conquering tribe as a whole. This is the first caste, initially a difference between Aryans and dāsas, as the word *varṇa* for caste and colour shows in conjunction with the recorded fact that the Aryans had a different colour from their predecessors in India. However, the existence of a caste, of surplus-producing labour, would necessarily promote rapid class and caste-differentiation among the conquerors; it certainly inhibited the rise of large-scale chattel-slavery in India. The wandering Vrātyas alone preserved the older tribal institutions down into historical times, having need of neither Brahmin nor Śūdra within the tribe; kingship with them remains a tribal office of small importance even when the tribe developed into an oligarchy over a tributary population. Brahmin scriptures continue to give a fixed theoretical status of a helot for the Śūdra, always distinghished from Ārya: one who is not eligible for initiation, barred from handling weapons, even from owning property, and whose function is solely to labour for the benefit of the three higher castes—though we know that this was on occasion tacitly contradicted by the rise of a Śūdra to the position of warrior, chieftain, or king, in historical times.

The conquerors must have destroyed cultivation as well as the cities; otherwise they could have settled down like their cousins in Egypt, Asia Minor, Mesopotamia as a new layer on top of existing class-relations of production. It is well-known that without irrigation the Punjab plains can support only a comparatively small population along the rivers, the rest being desert. Nowhere in Alexander's time do we hear of any cities comparable in size and organization to Mohenjo-daro. On the other hand, we find the common Vedic myth of Indra killing a demon to free the pent-up waters (sometimes called cows), which is invariably taken to denote a nature myth of the rain-god piercing clouds to cause precipitation. But we have a separate rain-god *parjanya* to whom entire hymns are dedicated (v.83; vii.101, 102). Indra's action is described in terms that can only mean that *the river-dams were shattered*; we know that a little to the west of Mohenjo-daro, there still exist tremendous prehistoric dams of this sort, though now useless in the absence of sufficient rain (Marshall, p. 3). The breaking of dams would destroy the very basis of agriculture, whence the Aryans would have to move their cattle to fresh pastures after a few years. Perhaps the clearest description is to be seen in iv.19.5, 4, 8: Indra shakes the ground as the wind the water, overthrows the mountains, forcibly bends down what was firm; the rivers hasten forth, all the stones roll away like chariots; for many days and years did Indra let the rivers run after the fall of Vṛtra, he freed the streams that had been bound (*badbadhānāḥ sīrāḥ*, the dammed rivers[23]). Only ignorance of the fact that there had been a civilization with fully developed agriculture in the desert, before the Aryans, could make anyone interpret this as a myth of rain-making. Similarly for i.32.8–10; viii.96.18; we hear of seasonal barriers in v.32.2, and vii.18.8 speaks of vain attempts at diverting the Paruṣṇī river, perhaps one of the causes of Sudās's wars. In ii.15.3 *vajreṇa khāny atṛṇan nadīnām* has been interpreted as Indra making canals for the rivers, but this quite unique action on the part of Indra may be doubted, because the verb and tool both indicate smashing, which is possible for a dam, not for irrigation channels. Besides the *dāsa* as a source of labour power, the humped Indus cattle were also an acquisition of the conquest; they are mentioned explicitly in in x.8.2; x.102.7, and perhaps in viii.20.21, and their truly Indian origin has generally been admitted. The use of the horse and of iron was known to the invaders before their irruption, according to archaeologists. We have here one reason for the victory of the Aryans over the indigenous population which knew neither.

Heterogeneity in the pre-Aryan people cannot be doubted. They cannot all have been residents of Mohenjo-Daro and Harappa with but a single profession! Even to support the inhabitants of a big city like either of these, there must have been a considerable food-growing ancillary population apart from the craftsmen in the cities, of whose social position we still know nothing, but who would be the logical candidates for the name and position of Dāsa, or Dasyu. All I can suggest is that a portion of the conquered rose instead of falling, and that they could only do this by adopting Aryan methods of fire worship, undoubtedly with some additions. Some of them must have had fire cults of their own, as for example the Bhṛgu-Aṅgiras group so often associated with the first discovery of fire. A few like Divodāsa[24] may even have been enrolled into the ruling Kṣatriya class, for the Aryans had come across many different people in their wanderings, and purity of 'race' at so early a period means nothing in comparison to the cult observed; adoption of a stranger needs only the formalities of initiation, and one becomes a Kṣatriya merely on account of prowess in battle. It seems clear to me that the formation of an internal, Aryan caste system, essentially the separation of the Brahmin in function and discipline from the Kṣatriya and the setting of both above the householder Vaiśya, after the *dāsas* had been conquered, must have been accelerated by the assimilation of a subjugated priesthood; for otherwise there is no reason for demarcation into endogamous castes. The Indic Aryans completed their own conquest at a far earlier period than the Zoroastrians (identifying Viśtāsp with the father of Darius I, after Herzfeld, pp. 30, 88) with more primitive tools and over cultures which were far more locally concentrated. The question can only be settled with more archaeological evidence; the purpose of such a discussion as the present is primarily to show the intelligent archaeologist what to expect, perhaps where to excavate, and how to interpret his finds.

As a preliminary, connections may be pointed out between certain obscure features of the *Ṛgveda* and actual finds in the Indus valley. The three-headed seated deity of the famous Mohenjo-Daro seal, our Fig. 1, may be taken for Tvāṣṭra, if the number of heads be actually three; there may be a fourth head away from the observer, which would make the deity proto-Brahmā. But the three-headed Tvāṣṭra cannot be entirely independent of other three-headed creatures on Indus valley seals. In E.J.H. Mackay's *Further Excavations at Mohenjo-Daro*, II, Pl. LXXXIII.24, XCVI.494, XCIX.B and Marshall's earlier work (*Mohenjo-Daro and the Indus Civilization*, London 1931) III. Pl. CXII.382, we find a seal depicting a three-headed bull. Now iii.56.3 refers specifically to such a bull in the *Ṛgveda*, while the entire hymn is to several otherwise mysterious multiple deities. So far, it has not been possible to demonstrate *dakṣiṇatas-kapardinas* on any seal but a god with braided hair is to be seen in our Fig. 2 (Mackay Pl. LXXXVII.235); the god, along with a priest and a row of seven human figures who are attendants at the sacrifice all show long hair-braids (in Mackay II, Pl. XCIV.430, Pl. XCIX.A = Marshall I, Pl. XII.18). Kapardin should rather mean with twisted than braided hair, but the matter is not settled. Punch-marked coins also yield occasional homo-signs with hair-twists or braids (Durga Prasad, *JRASB*. XXX. 1934, Pl. 21, nos 132–3) but the coins belong to the Mauryan period, and are tribal, not Brahmanical, as I interpret the evidence. The row of human figures at the bottom of the last seal referred to show a horn-like decoration on the head besides the braid; this might qualify them for the title Viṣāṇin (vii.18.7), while the god of Fig. 1 has a headdress which certainly has two (buffalo?) horns for its components. The animals surrounding the deity are to be interpreted as totems, on the great seal of Fig. 1.

Marshall (p. 15) misses the significance of the cup-like depressions on the shoulders of the Harappa red stone statuette. They are not meant for fixing ornamental discs, for in that case the little boss in the centre would be unnecessary; the intention is clearly to fix an extra pair of arms which could be swivelled around, just as the head is meant to be turned in the neck-socket. Marshall takes the other fragmentary Harappa dancing statuette[25] as with three heads or faces, though only the stump of a thick neck remains; it had not more than two arms. But the four-armed figure had become so classical as to be given the status of a pictogram in the Indus script. It is rather amusing to see Langdon (Marshall, p. 446, *signs* 183, 184) leave the particular homo-sign unexplained or call one variety 'man supporting two clubs', when an extra pair of arms, or snakes, or rivers springing out of the shoulders could be the only possible explanation, as may be confirmed by looking at the corresponding seals in the volume of plates. The reduction to a hieroglyph may indicate that the type originates in or at least is closer to the Indus valley than to Mesopotamia. The transition from the Indus representations of a deity with an extra pair of arms to the Mesopotamian god with rivers flowing out of his shoulders may be seen in Vats, pictograph 383*c* (Pl. CXV) and seal 35 of Pl. LXXXVI. Possibly, his symbol 388 *a* might also have developed from the common source. Mackay (Pl. LXXVI.8) reports a unique two-faced clay image fragment, the faces being beardless and slant-eyed whence the connection (if any) with the two-faced Mesopotamian Usmu is not direct. *RV.* i.51.5, *svadhābhir ye adhi śuptāv ajuhvata* 'those who sacrificed upon the shoulders (and were destroyed by Indra)' might indicate cults related to the above Indus pictograms or rather to their originals.

The absence of fuller archaeological evidence from the Indus valley forces us to consider parallel Mesopotamian seals, permissible because the existence of a common element to the two cultures is admitted.[26] The Hydra (Nāga, Śeṣa) appears with five or seven heads (Frankfort p. 72, Fig. 26; Pl. XXIII.*j*); much later, human figures with two animal heads, goat and stag (ibid., p. 271). As the labours of Herakles originate in these seals, the three-headed Geryon-Cacus, or a Kerberos, would have linked up with the Indus seals. However, Ea (originally Enki, a water-god like Nārāyaṇa) has a *two-faced* attendant, Usmu according to Furlani, who performs the functions of minister and herald, i.e. is equivalent to a human priest or priest-king. The two rivers flow generally from Ea's shoulders, occasionally from a jar in his hand. His other attendant, a bearded naked athlete of the Gilgameś-Herakles type, also sometimes holds such a river-jar. Frankfort Pl. XXVIII.*k* shows both on a Babylonian seal, in such a way that the rivers might seem to emerge from the hero's shoulders; this seems to be the general case later, c. Pl. XXXIX.*i*; in XLIV.*m* the river goddesses themselves might be the two attendants flanking the hero from whose shoulders stream the waters. On Pl. XLIV.*i* (a peripheral seal) the two streams emerge from a naked goddess's shoulders, as well as those of a much smaller male, perhaps her son. As the water-hero goes back at least to Akkadian times, we must see in him a representative of Ea, and the two-faced attendant must be another such, like the goat-fish which is later Ea himself. This will have to be used in interpreting Indus valley evidence, and *Ṛgvedic* references. The goat-fish symbol of Ea (Frankfort, Pl. XXV.*d*; XXVIII.*k*; this seems to me the original *matsya-avatāra* and *aja ekapāda*) is reversed on the Mohenjo-Daro 'sacrifice' seal, in that the animal before the god is a ram with the head of a fish (first pointed out by Fr. H. Heras S.J.). The sun-god has, like some other deities, rays emanating from his shoulders; usually three from each but the number is not fixed. This must be the original depiction of *saptaraśmi*, the Vedic adjective. Other deities have vegetation replace the rays (Frankfort Pl. XX.*c, e, j, k*). On the Gudea seal (Frankfort p. 143) the dragon-god Ningiszida shows two snakes or dragon, rising from his shoulders, like the later god Tiśpak, XXV, *e*, which relates both to the Zohāk of the Shah Nameh. Occasionally, as on the Hammurabi stèle, the rays curl up at the end, and Pharaoh Ikhnaton's reliefs tell us that they could terminate in hands, whence it is natural that they should develop from or into supernumerary arms. The best cylinder seal for our purpose is Fig. 3, from BM 89115, Frankfort Pl. XIS.*a*, which shows the sun-god being resurrected or liberated from his mountain grave by Ea and a goddess (Ishtar). The sun and the goddess show rays emanating from their shoulders, the central rays of the goddess terminating in what might be taken as hands. Two rivers, proved to be such by the fish swimming therein, stream out of Ea's shoulders, and he is followed closely by the two-faced attendant. As for the goddess, whose various traits are fully enough developed (on seals) by the time of the first Babylonian dynasty to prove her identity with Ishtar, the rays radiating from her and her evoking the sun would make her also a dawn-goddess. As such, she has a great deal in common with the Indian Uṣas, worshipped even in the plural in the *Ṛgveda*, too prominent for a mere goddess of the dawn. Indra comes into violent conflict with her, shattering her car (ii.15.6; iv.30.8–11; x.138.5; x.73.6); this has, fortunately, no real interpretation as a nature myth, and can only indicate a clash of cults. If now Uṣas were a mother-goddess (for which one can easily find *Ṛgvedic* indications) like Ishtar, her bringing out the sun (originally Tammuz) would still be remembered after the Aryan conquest and would enable her to claim a modest position as dawn-goddess, even after Indra had put her to flight. It is known that Enki-Ea is originally the god of the land, not of the waters. Frankfort p. 116, Fig. 32 shows us Inanna-Ishtar seated as priestess before her own image-altar, receiving homage from some devotee; she holds the two-river jar in her hand. Thus the naked goddess (on Syrian group II seals) from whose shoulders the two rivers stream is an old survival, and Ishtar must—possibly under some other name—have been the earlier river-deity displaced peacefully by Ea. Her consort Tammuz is bewailed as both husband and son, the root-word *damu* meaning both. This is quite natural, and wherever we have a clear historical course of development within the culture, patriarchal cults develop in precisely this manner from the matriarchal, by consortship of a son or husband with the priestess. To

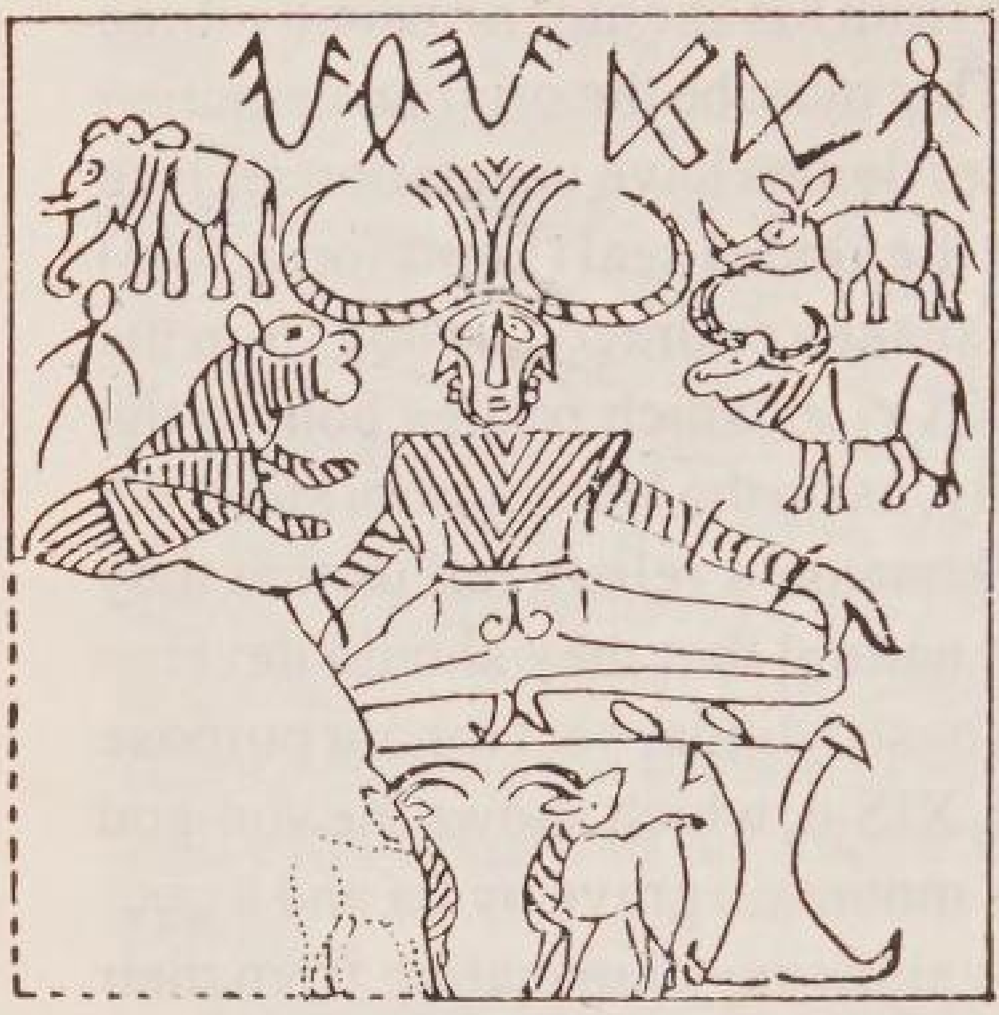

Fig. 1. The Three-faced Indus God
(After *DK*. 5175)

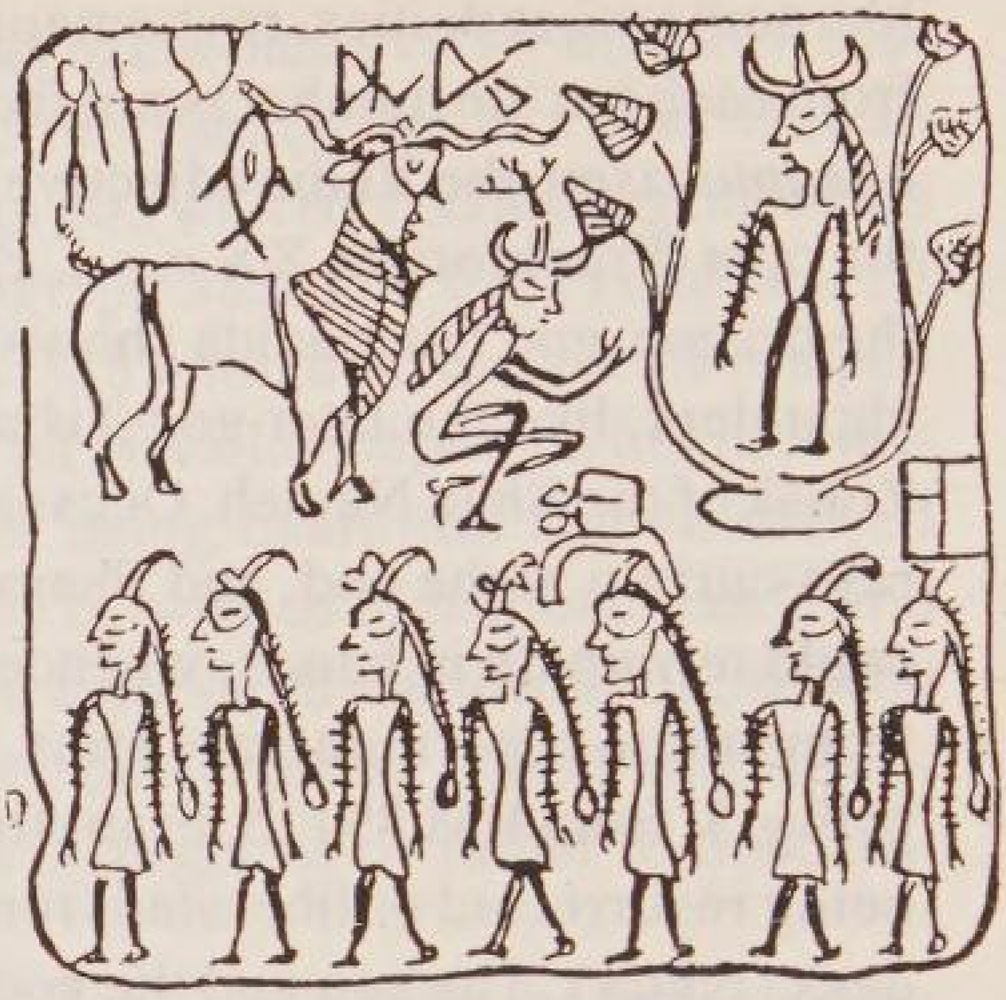

Fig. 2. 'The Sacrifice'
(After *DK*. 6847)

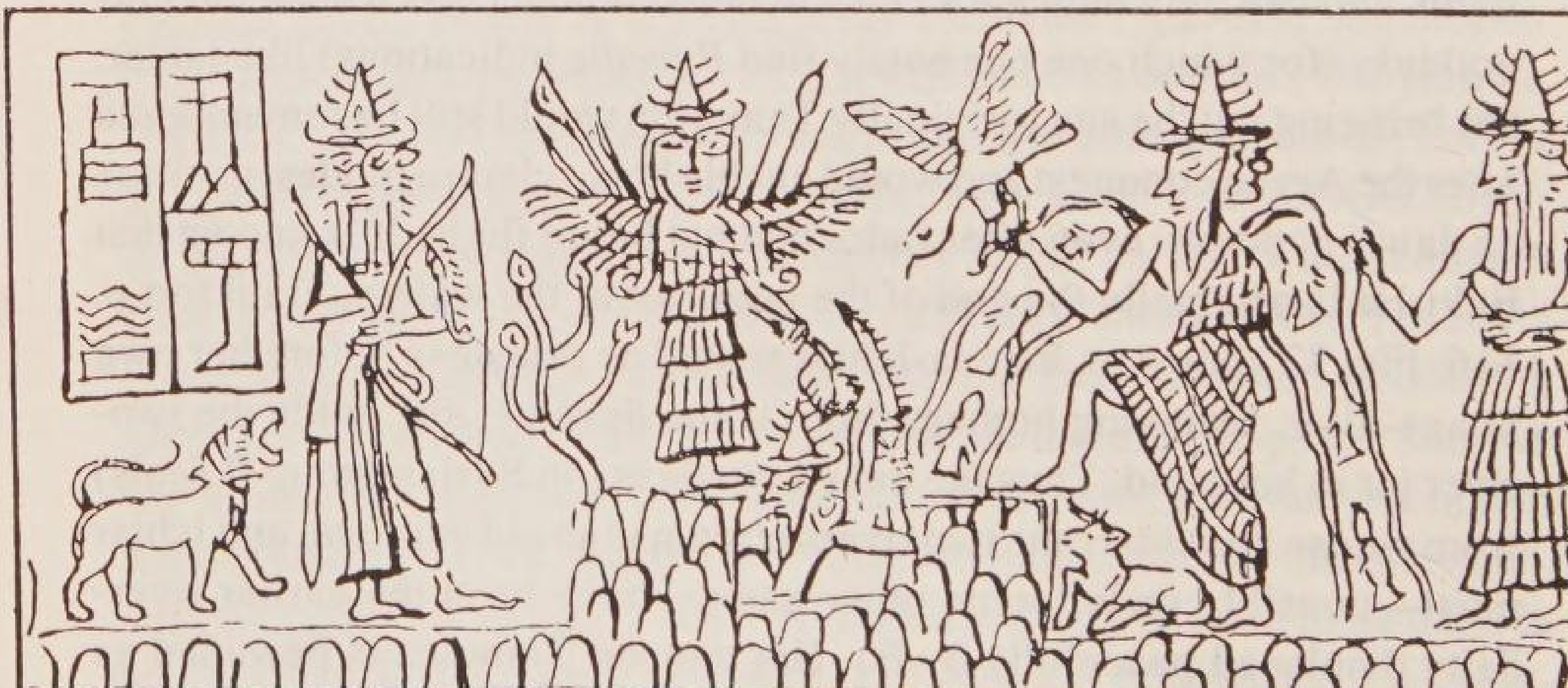

Fig. 3. Resurrection or liberation of the Sun-God from his mountain grave
(After *BM*. 89115)

revert to the common substratum for the Indic and Mesopotamian river-civilizations, it may be pointed out that the horned headdresses of Mesopotamian gods, though more complicated, again connect them with the three-faced Indus god, as well as the deity on the 'sacrifice' seal. The latter seal has seven attendant figures with braided hair, and the number is interesting though they lack individuality. The seven sages (*saptarṣis*) are not only an Indian group, but highly reminiscent of the seven Mesopotamian antediluvian sages, whose images are actually found buried in groups of seven. Marshall (pp. 64–5) takes the deity and ministrant figures in the 'sacrifice' seal to be female which seems quite unlikely to me, while the animal is ascribed a 'human' face instead of the quite obvious fish, which argues lack of care in examination, or myopia.

The row of seven figures marching single file hand in hand, but in the opposite direction appears again on a fragmentary seal (Vats, *Excavations at Harappa*, New Delhi 1940, Pl. XCI.251). The principal difficulty lies in proving their connection with the seven Mesopotamian 'ancient *apkallu* who were before the flood in Shuruppak.' Their line of descent in India is clear enough. *RV.* i.24.10 calls the stars of Ursa Major *ṛkṣāḥ*, the Bears; *Śat Brāh.* ii.1.2.4 makes the Pleiades (*kṛttikās*) wives of these Bear-ṛṣis. *Śat Brāh.* vi.1.1.1 even claims that these ṛṣis wore themselves out with toil creating the universe, which fits the *ṛk* iv.2.15; *Śat Brāh.* ix.2.3.44 tells us that these seven were addressed as 'seven tongues, and *were made into one person*. The idea of our seven primary groups is obviously much older than the beginning of the present clan system. The seven, sages, as *vipras* or *ṛṣis* are called 'our ancestors' by the Brahmin seers of *Ṛgvedic* hymns, particularly by the Aṅgirasas in iv.42.8 which makes them present when Durgāha's son (Purukutsa) was taken prisoner; and vi.22.2, *tamu naḥ pitaro navagvā sapta viprāso abhi vājayanta*. This might seem self-contradictory as the Seven cannot be split into the Nine or the Ten, but association of the seven sages with the Navagvas and Daśagvas is repeated in i.62.4, and perhaps ix.108.4 where Dadhiañc appears as a Navagva. At the very least, we can say that they are pre-Aryan associates of a mother-goddess in creation. The goddess survives later as Uṣas, daughter of the sky, after being smashed up by Indra as an evil-plotting female (iv.30.8–11). The Mizar-Alcor combination in Ursa Major is still known as Vasiṣtha and Arundhatī, but we have several other versions in which the smaller companion star is the common wife of all seven of the sages (*Mbh.* 1.188.14).

It is clear, though difficult to prove, that the unnamed seven laid low by Indra (x.49.8) and whose enemy Indra became from his very birth though they had till then been without an enemy (viii.96.16) are these seven sages. Their supposed consorts, the Pleiades, are to be seen often enough as a constellation on Mesopotamian cylinder seals.

Uṣas as a mother goddess connected with the seven sages appears explicitly in iv.2.15: *adhā mātur uṣasaḥ sapta viprā jāyemahi prathamā vedhasa nṛn*; 'we seven sages will generate men from mother Uṣas who (will become) the first ritualists; we shall become Aṅgirasas, sons of heaven, we shall burst the rich mountain, shining forth'. Mother-goddess figurines are perhaps the commonest Indus city finds, one type being bird-headed, like the dove-headed Venus of the early Mediterranean culture. Marshall p. 52 describes the seal on Pl. XII, no. 12 which shows a mother-goddess upside down, giving birth to vegetation,[27] hence presumably the earth-mother; the other side represents her or another female deity seated, with streaming hair, approached by some male worshipper. This last is mentioned only because Marshall interprets the scene as the sacrifice of a female by a man, for which the seal itself shows not the slightest evidence. The Aṅgirasas bursting the mountain, a common enough figure of speech, is highly suggestive, when we compare the action of the Sun-god on the Sargonid seal, with v.45.1–3. Only the saw is needed to complete the description. But the *Ṛgvedic* scenes are remarkably well depicted on Frankfort Pl. XVIII.*a*, where the god of light bursts the mountain and causes the gates to be thrown open.

One important difference has to be emphasized when considering these resemblances. Weapons such as spear or lance-heads found at Mohenjo-Daro have been so flimsy that they could have served only for decorations in some ceremonial; this contrasts strongly with the sturdy bronze tools found in the same deposits, and with the war-materials in Mesopotamia. Allowing for the painful incompetence of our archaeologists, it still seems evident that the mechanism of violence was less developed than one would expect in a city of this size, even though it was primarily a trade and manufacturing centre.

The archaeological evidence for battle and conquest being undeniable *one may venture to identify Harappa with the* Hariyūpīyā of vi.27.5, making the assumption that the locality has preserved its name through the millennia. The hymn praises Indra's shattering the front line of 130 panoplied Vṛcīvats whereby the rest of the army was broken in the battle on the Yavyāvatī river;[28] thus Indra handed over the Varaśikhas and Turvaśa to Daivavāta, which may be Sṛñjaya as well as Abhyāvartin Cāyamāna. Rather than press such identifications, which can have little value till we read the Indus valley script, attention may again be called to the two seals above. The (three-horned) trident which the supernal figure wears on his head in the 'sacrifice' seal (Fig. 2) is related to the buffalo-horn headdress of the three-faced god in the better-known seal of Fig. 1, as well as to the three faces of that god, and the later trisula symbol. The adjective *śṛṅgin* does occur occasionally in the *Ṛgveda*; (Agni described as) Tvaṣṭṛ seems to be three-horned according to v.43.13 and we have noted the Viṣāṇin tribe, labelled *śivāsas*, in vii.18. Lastly, anyone with the three-peaked headdress as on the sacrifice seal could be called *triśaṅku*, and as the figure is between heaven and earth (probably a god descending for the sacrifice), we have here one possible source of the Viśvāmitra-Triśaṅku myth.

For the first identification of the later cemetery at Harappa as Aryan, cf. V. Gordon Childe, *New Light on the Most Ancient East* (London 1935, 223–4); R.E.M. Wheeler, *Ancient India*, no. 3, 1947, 81 ff, gives a discussion of the archaeological evidence for Aryan conquest and occupation at Harappa; for the ponderous incompetence of Marshall's and Mackay's excavation of Mohenjo-Daro, ibid., p. 144.

Iranian Parallels

10. There is no doubt that Indo-Aryan society as reorganized with Brahminism opened up the swampy lands of the Gangetic basin, so that caste was an essential feature of more efficient means of production, the development of fixed settlements, and the state. The word *brahman* for the priesthood is not to be found outside India; and whereas exogamous patriarchal gentes within the tribe or community are known to have existed among Latin and Greek societies after the Aryan invasion of those respective territories, we have no general example of fire-priesthood as the exclusive prerogative of a hereditary caste, though occasionally a gens has the rights of chief priesthood for some particular cult. There is, however, a rudimentary caste system and a fire-priest caste among a neighbouring Aryan people, the Iranians; this case has to be considered in detail.

Our sources[29] of knowledge for the Iranians are the fragmentary Avestan and Pahlavi religious texts, plus the reports of Greek travellers and historians. The first group of documents is lacunary, of late redaction as shown by the reference to the followers of a heretic Gaotema (Yt. xiii.16, now identified with the Buddha and not Nodhas Gotama), and in addition bears the stamp of a thorough religious reform, that of Zoroaster, which succeeded with the Achaemenids in the sixth century BC. Comparison with the *Ṛgveda* is difficult. Greek notices supply foreign travellers' accounts far superior to anything comparable for that period in India, but are occasionally hostile and sometimes not credible. Taking all these into consideration, the presence of at least one major stream of common tradition between Indic and Avestan Aryans is not to be doubted. Apart from the language of the *gāthās* and old Persian inscriptions, so similar to Sanskrit, we have the common fear of the demons called *yātu*, worship of Vāyu, love of the sacred *haoma* = *soma* drink, and the basic position of the fire cult. Steady contact had been maintained through regions known to both people, as for example 'Vaekereta of the evil shadows' (= Kābūl), and the land of the seven rivers (= the Punjab), the seventh and the fifteenth respectively of the sixteen regions created by Ahura Mazda (*Vd.* i). King Yima is much more prominent in the Vendidād (Fargard ii) than Yama in the *Ṛgveda*, but the identity is not in doubt; the Avestan Sarasvatī ('the beautiful Harahvaiti' of *Vd.* 13) is the Arghand-āb, and not one of the seven rivers in India. Verethraghna is the 'glory made by Ahura Mazda' (*Vd.* xix.37, and Yt. xiv); Indra has been made into a demon by the reform, though still under the title of *daeva* (*Vd.* xx.43, x.9). Then there is the rather ambiguous position of the golden-heeled Gandareva, a demon (Yt. v.38, xix.41), but not without respect (Yt. xiii.122, xv.28); he has been transferred to the deep though the Indians place him in the atmosphere.

For our main purpose, we have to note specifically the three supposed castes of the Iranians (*Vd.* i.16, three races, from the Azerbaijan). But the division into fire-priests, warriors, and husbandmen is not a degradation of the last as it was for the Vaiśya in the *Taittirīya Saṃhitā* and later Indian scriptures, for they are descended from the three sons of Spitama Zarathuśtra who is himself not only the first and foremost fire-priest (Yt. xiii.94) but the first warrior and the first plougher of the ground as well (Yt. xiii.88). The husbandman is honoured on earth, and his progenitor supreme in the Var of King Yima (*Vd.* ii). We have therefore *a division into classes, not castes*. Now the Avestan title of the fire-priesthood is *āthravan*, which is undoubtedly the Vedic *atharvan*, and again shows an ancient unity of tradition to which Zoroaster reverted in clearing off the bloody (and of course uneconomic) sacrifices that obscured the (supposed) original purity of Aryan worship, whereas Buddha and the Jains took up the philosophy of *ahiṃsā*. The Iranian Āthravan leads the way after a path has been purified from the extreme pollution of a funeral (*Vd.* viii.19). The Āthravans who read, and their pupils, will beg knowledge and prosperity of Ardvi Surā Anāhita (Yt. v.86). Yt. xiii.147 says 'here are the *āthravans* of all countries' come to worship the Fravaśis, while

Yt. xvi.17 refers to the Āthravans sent afar, presumably wandering (even mendicant) missionaries. The fine qualities of an Āthravan are given in Yt. xix.53, and the caste still monopolizes the priesthood among the Parsis, theoretically endogamous though not rigidly so in practice.

On the other hand, western travellers know of Iranian priests as Magi though Zoroaster uses *maguś* and *magopat* only as adjectives, with the meaning of great. The original Magi were one of the six tribes of the Medians (Her. i.101), who were a western branch of the same race, first subject to the Assyrians, then independent and overlords of the eastern Persians, and finally conquered by the latter but in close alliance nevertheless after Cyrus and Darius I. Yet the Greek tells us that the Magi took a peculiar delight in killing all living things except dogs and men (Her. i.140). The special protection given to dogs (*Vd.* xiii *et passim*) is, of course, a feature of ancient Persian means of production and of the high status of the husbandman; the dog in the Avesta is the most useful of man's friends in the protection of the household and of cattle. The killing of all sorts of lower animal life which Herodotos notices is sanctioned, and even demanded by Vendidād xiv.5–6. For our thesis, it is of special interest to note that the Magi recovered their original position of respect,[30] and continued as an 'honorary tribe' to be priests (with readjustment to the new reforms) but that they had first undergone attacks similar to those suffered by the Bhṛgus and other early Brahmins. In particular, the story of Darius and the false Smerdis (Her. iii.61 seq., fully supported by the inscriptions of Darius) and the festival of the Magophonia (Her. iii.79) show that special action had to be taken against the Magi as a whole, but that massacre did not end their priestly function. For that matter, we also know that some of the older gods had to be readmitted into the pantheon (Herzfeld pp. 401, 408–9) though with suitable changes. In other words, we have a parallel to the happenings in India, and for similar reasons: conquest and reassimilation, with a conquered (though here Aryan) clan imposing itself upon the priesthood by virtue of superior ritual.

The *Ṛgvedic atharvan*, though belonging to so remote a past as to appear more than human, and without a surviving *gotra* (unless we infringe upon sacred tenets of philology to relate *athar* to *atri*) to commemorate his existence, still occupied a far more important historical position than would appear by the comparatively rare citations. In x.14 and x.21.5, he is associated with Yama while in x.120.9 we have Bṛhad-diva as an atharvan; but the signal honour given in x.120 to the supposed ṛṣi and the actual meaning of the name itself seem to reflect the stature of someone like Ahura Mazda, who is himself a sky-god (Her. i.131) sublimated and an Athravan (Yt. i.12). In x.48.2 Indra Vaikuṇṭha declares that he protected Atharvan and Trita, and bestowed upon them the cattle released from *ahi*, presumably Vṛtra referred to as a snake; an Avestan parallel to the Paṇi episode is perhaps the prayer of cattle to Mithra, for release from the den of the Druj (Yt. x.86). in viii.9.7, as in ix.11.2, Atharvan is clearly the fire itself upon which *soma* is sprinkled. In vi.47.24, the Atharvans and Pāyu Bharadvāja receive ten special chariots and a hundred head of cattle from Aśvattha; the same Pāyu Bharadvāja as the supposed seer of x.87.12 mentions the Atharvan flame as most effective in driving away *yātudhāna* demons. The bones of Dadhyañc Ātharvaṇa are used by Indra to kill the nine nineties of his dark enemies: i.84.13 *indro dadhīco asthabhir vṛtrāṇy apratiṣkutaḥ; jaghāna navatir nava*. In fact, Atharvan is explicitly the first *yajña* sacrificer according to i.83.5 and x.92.10 while the atharvan fire-drill or method of lighting the fire is lauded in vi.15.7 as in vi.16.13–14; the last *ṛk* calls Agni by Indra's titles, *vṛtrahaṇam puraṃdaram*, which shows again that fire was used as a poliorcetic weapon by the early Indic Aryans, and incidentally explains how the Avesta could separate Verethraghna from Indra. The most important of all references to Atharvan is x.14.6 where we have an association in the same line with Aṅgiras, the *pitrs*, the Nine seers (*navagvā*), and the Bhṛgus, the last of whom also appeared in x.92.10. At this stage, we note that the *ṛks* containing any reference to Atharvan are overwhelmingly of Bharadvāja or Gotama origin, i.e. of Aṅgiras authorship. Later, the whole of the *Atharva-veda* is called the Atharvāṅgiras, (cf. *Mbh.* 5.18.5–8) and the special combination appears with the highest eminence in that Veda. Finally, we have seen that the Bhṛgu-Aṅgiras combination also exists, which shows just why the extinct Atharvan was important in India: *The Atharvan is the proper fire-priest of one Aryan group, and association with him was the means whereby the Aṅgirasas and the Bhṛgus climbed into Vedic priesthood.* This gives us much the same historical development as that of the Maguś in Persia. In the *Muṇḍaka Upaniṣad* i.2 we have the line of teachers as Brahmā-Atharvan-Aṅgir-Bharadvāja Satyavāha-Aṅgiras. This is a step towards the final inversion to be found in still later traditions which makes Atharvan an Aṅgiras, the very first.

However, not everything can be explained by parallel historical developments, and like the name of the river Sarasvatī, there is possibility of a legend being transferred. The story of the hero Thraetona and the demon Azi Dahāka is here of considerable interest. The Persian hero of the Āthwya clan performs a great sacrifice of a hundred stallions, a thousand oxen, and ten thousand lambs to Drvāspa (Yt. ix.13–14) or Ardvi Sūra Anāhita (Yt. v.33–4) or Vāyu (Yt. xv.23–4; cf. Yt. xvii.33–4) for the destruction of the snake. Azi Dahāka himself 'the three-mouthed, the three-headed, the six-eyed, who has a thousand senses, that most powerful fiendish Druj, that demon baleful to the world' makes the same sacrifice in the land of Bāwri (= Babylon) to Ardvi Sūra Anāhita (Yt. v.29–31) and to Vāyu (Yt. xv.19–21) 'in his accursed palace of Kvirinta' in order to destroy the seven habitable regions of the world (Karshvares), but his great sacrifices are rejected. The hero Thraetona Āthwya prays successfully to destroy him and set free his 'two wives, Savanghavac and Erenavac, who are the fairest of body amongst women, and the most wonderful creatures in the world' (Yt. ix.14). Now a three-headed demon is known to the *Ṛgveda* as Triśiras Tvāṣṭra, and in the slaying, Trita Āptya has been seen to be associated with Indra (x.99.6, x.8.8) which has been taken as sufficient for the identification by most scholars. The divine Vāc, of which the *Ṛgveda* knows more than one variety, though not as the wife of Triśiras, is the speech monopolized by our Brahmins, later deified as Sarasvatī. The legend deserves a little closer analysis. The Avestan Thrita is the first healer and founder of medicine (*Vd.* xx), but a member of the Sāma family, which again sounds familiarly Vedic. Traitana occurs only once in the *Ṛgveda*, as the pre-Aryan or demon (*dāsa*) whose blow at Dīrghatamas recoils upon himself, leaving the sage unharmed, to float down the river: i.158.5 *śiro yad asya traitano vitakṣat svayaṃ dāsa uro aṃsāv api gdha*. It is possible to see the discordant features at a glance; the great difference of territory between the four-cornered Varena (Tabaristan), for which Thraetona was born to smite Azi Dahāka, and the eastern portion of the Indo-Aryan domain is significant. In addition, Azi Dahāka survives to tempt Zarathuśtra: 'Renounce the good Religion of the worshippers of Mazda, and thou shalt gain such a boon as Vadhaghna gained, the ruler of the nations' (*Vd.* xix.6). Yet the historic substance of the legend is enhanced by analysis. In the first place, Azi is a king, as shown by his palace and great sacrifice, which was not only repeated by his slayer but (near lake Urumiah = Caecaśta) by Kavi Husravah, 'He who united the Aryan nations into one kingdom' (Yt. v.49, 32, ix.22); at the White Forest by the 'murderer' Aurvasāra fleeing from Husravah (Yt. xv.31); and by Xerxes (Her. vii.43, 113; cf. i.50). His connection with Babylon is curiously supported by later legend, for the Shah Nameh describes him (= Zohāk) as with two snakes springing from his shoulders (cf. p. 27 of the Shah Nameh translation into English verse by A. Rogers, London 1907). Zohāk is not an ordinary king but a successor to Yima-Jamshed himself. The black snakes that issued from his shoulders (as the devil kissed him there) appear on Mesopotamian seals as shoulder-rays from the sun, dragons from the shoulders of Tiśpak-Ningiszida or rivers issuing from the shoulders of Ea or the hero Gilgameś of Sumerian legend; from them to the four-armed characters of the Indus valley seals and later sculpture is only a step, the actual transition probably being in the opposite direction. Śiśupāla (*Mbh.* 2.40.1) the Cedian was born four-armed and three-eyed. The god (?Sun) on Hammurabi's stèle has curved flames issuing from his shoulders. Thus, the legend is rooted deep in the historic tradition of Aryan conflicts with great pre-Aryan civilizations in the Indus valley as well as in Mesopotamia; we know that these civilizations had long, continuous co-existence and intercourse, as well as many common features, probably some common origins. In this case, I should be inclined to consider the event itself as having occurred in the Indus valley.

Just what the snake-demon signifies I cannot venture to say in this context especially as his connection with the cult of the Mother-Goddess and pre-patriarchal family life is known, but not preserved in either of the two-Aryan sources under discussion. However, other heroes conquer multiple-headed snakes as for example Herakles and the Hydra, or the Indian counterpart Kṛṣṇa and Kāliya; yet the Hydra has one head which is immortal, and Kṛṣṇa only subdues Kāliya without killing him. The vast though inobtrusive current spread of the nāga cult need not be given in detail. One major Hindu holiday is dedicated to the cobra. Cobras are regarded by many (my mother, grandfather, uncle, and cousins among them) as embodying ancestral spirits, and the live snake himself generally forms an appendage of most rustic temples. Śeṣa's bearing the whole earth on his multiple hood goes back much further than the obviously recast legend in *Mbh.* i.32. Viṣṇu sleeps upon the great (many-headed) cobra, Śiva wears him as a necklace, and the cobra's protective hood is reared above the phallic symbol of Mahādeva. The chief cobra Takṣaka escapes being burnt down with the Khāṇḍava forest (*Mbh.* 1.218.4; the whole episode is one of land-clearing in the typical Aryan manner, by firing the woods and slaughtering all inhabitants), and is barely saved from Janamejaya Pārikṣita's fire-sacrifice by his human nephew Āstīka. The name *takṣaka* is related to *takṣan* = carpenter, hence to the god Tvaṣṭṛ; and to Takṣaśilā, (the Greek Taxila) which was the capital after the *Mahābhārata* war. Thus Taxila to Kurukṣetra must have been the territory of a tribe or tribes which had a cobra totem or cult. Nāgas remain extraordinary craftsmen in Indian folklore, demonic beings able to assume human form at will. Kṛṣṇa's elder brother is usually taken to be an incarnation of the great Nāga. The demon Vṛtra is called *ahi* in the Veda, but the snake of the deep *ahir budhnyas* remains an object of wor--ship. References to *ahi* are scattered throughout the Veda with the important exception of the Viśvāmitra book. Here, the word *ahi* is found only twice (iii.32.11 and iii.33.7), in both cases referring to Indra's killing of the demon Vṛtra in order to release the waters. The peculiar difference between Vṛtra or Triśiras and Azi is undoubtedly to be explained by the historical differences in the relations between the Aryans and the conquered people in India, as against the Aryans and their Assyrian enemies in Persia. As for the Aṅgiras Dīrghatamas (*Bṛhaddevatā* iv.11–12), his name itself shows association with darkness (explained away by his blindness, i.147.3; iv.4.13), hence with the Vṛtras who are the enemies of Indra and the Aryans. But in spite of the familiar royal persecution he left descendants who became Brahmins in the main priestly lineage, while Traitana left his mark only upon a very distant branch of Aryans. Thus even this legend supports the contention that the development of Indo-Aryan sacerdotal tradition is by assimilation of a pre-Aryan element, which has special connection with the Brahmin caste, particularly in its original stages. With the Zoroastrians, success meant that the religion was predominantly that of a comparatively small number ruling over vast territories inhabited by far more numerous peoples which had diverse customs of their own and in some cases law-codes going back to Hammurabi. Therefore, the development of a new *gotra* system among the Magi was not necessary. In India, on the contrary, the conquest meant destruction of the Indus valley urban cultures, reorganization of society into castes, and progressive opening up of new, sparsely settled, and heavily wooded territories to the east. This gave opportunity for each group of priests to be attached to or adopted by several Aryan clans, which must have been the origin of Brahmin *pravaras*.

Trita Āptya: The Origins of Epic and Saga

11. The Avestan Vadhaghna can be equated without difficulty to Indra himself under the title of *vadhasnu*, bearer of the death-dealing weapon, though *vajrin, vajra-hasta*, etc. are the usual adjectives. Vadhasnu is actually used of Soma (= *indu*) in ix.54.3. We hear of the gods shooting down upon men (v.41.13) and Agni breaking down walls (vii.5.5) with a *vadhasna*. Indra's weapons have the same name in i.165.6 (*vadhasnaiḥ*);

equivalent forms *vadha, vadhar*, etc. are found in considerable profusion: vii.83.4, Indra-Varuṇa *vadhanābhir vanvantā*; So, Triśiras being a *purohita* of Indra might be reflected in the association of Azi Dahāka with Vadhaghna in the Avesta.

Of the block of seven hymns (i.51–7) ascribed to Savya Aṅgiras and all dedicated to Indra, i.53 begins 'Let us sing a hymn to great Indra, dedicate chants to him in the abode of Vaivasvata'. The location is reminiscent of the Var of Yima. 'Thou (Indra) has crushed under thy irresistible chariotwheel the twice ten tribal kings with their 60,099 men, who fought against kinless (*abandhunā*) Suśravas. Thou didst aid Suśravas with thy support, Indra; with thy protection thou gavest to the victoriously advancing (*turvayāṇam*[31]), Kutsa, Atithigva, Ayu into the hands of the great young king' (i.53.9–10). I suggest that this fits the Avestan Husravah very well, though here the title of Kavi is not mentioned, and the opponent Aurvasāra is not recognizable.

Even more instructive is the series of references to Trita Āptya. Let us first report what the meticulous Grassmann (col. 557) has to say: 'Trita is originally "the third" and therefore set up against a "second" (viii.47.16.1). Designation of a god who is probably obliged for his name and worship (i.187.1; i.163.2.3; 1.52.5; viii.7.24) to a pre-Vedic point of view, because of which he also occurs often in the Zend. Already in the *Ṛgveda*, his original being appears obscured, in that he shows to a certain extent as the background for the world of Vedic gods. Thus he appears in a definite manner as the predecessor of Indra, who strikes down demons just like him and frees the imprisoned streams; for this relationship i.52.5 is particularly characteristic, where it is said of Indra that he broke the defences of Vala like Trita. 2) So he blows upon Agni (v.9.5; x.46.3), discovers him, establishes him in the houses of men. 3) He leads Varuṇa-Soma to the sea (ix.95.4) and even seems himself to be Varuṇa (viii.41.6.4). He appears in alliance with other gods (ii.31.6; ii.34.10, 14; v.54.2; viii.12.16), namely also 5) with the winds (x.64.3; x.114.4) and 6) with Soma (ix.32.2; ix.34.4; ix.37.4; ix.38.2; ix.86.20; ix.102.2, 3; ii.11.20), so that the fingers that purify the Soma appear as Trita's virgins (ix.32.2; ix.38.2), the Soma stone as Trita's stone (ix.102.2) and Soma as coming to Trita (ix.34.4). So he is represented 7) as living in the far unknown distance (i.105.9) and therefore 8) carried away to Trita (viii.47.13, 17) is equal to carried very far away. In all these conceptions, he appears with the qualification *āptya*, as also in meaning 9. But besides this conception of Trita as a higher deity, he appears also 9) as a lower god (i.102.1; ii.11.19; x.48.2; x.99.6; x.8.8) who performs labours in the service of Indra or 10) calls upon the gods for help (i.105.17; x.8.7) when fallen into a well. Finally 11) in the plural, a whole class of gods is so denoted (vi.44.23) in whose abode Indra found the nectar of immortality'.

This shows that Trita, though faded, had at one time a substantial following. The whole nexus can very well be explained by our present hypothesis if the course of historical development be taken into consideration. One may remark that viii.47.13–17, where evil demons and nightmares are exorcised away to Trita Āptya need not just mean driving them away to a far distance but may also be in the nature of a curse upon Trita. In any case, Trita's distance in time and place from the *Ṛgvedic* seers and the major stream of tradition need not be doubted, particularly as he finds no mention in the Viśvāmitra, Vāmadeva, and Vasiṣṭha books. The higher forms of Trita must indicate his antiquity and ancestral position for some clans, say the Āptyas, while the prayer from a well might preserve a memory of his actual humanity. Very significantly, Indra is himself called *āptyam āptyanam* (x.120.6). Knowing what we now do of the Aryan invasion, it seems plausible that Trita is Indra or one of the invading Aryan chiefs, later collectively deified under the title of Indra.[32] His separation from Indra is helpful, seeing that some time after the conquest Indra has to be worshipped by *brāhmaṇas* in spite of the still-remembered killing of their ancestors, and destruction of their gods and cities. In fact, we have seen from the Avestan tradition that Azi Dahāka is literally a *vācaspati* as the husband of two kinds of *Vāc*; the word *vācaspati* is used without further definition in ix.26.4, ix.101.5, x.166.3, while we have *vācaspatim viśvakarmāṇam* in x.81.7. Vācaspati is peculiarly Bṛhaspati or Brahmaṇaspati, and so it is not surprising to find Bṛhaspati as with seven (instead of Triśiras's three) mouths, *saptāsyasas* in iv.50.4, while iv.51.4 has *yenā navagve aṅgire daśagve saptāsye revatī revad ūṣa*. Brahmaṇaspati may have developed later (cf. x.68, Bṛhaspati rivals Indra's feats; Brahmaṇaspati as the creator, x.72.2) quite naturally into the four-headed Brahmā, which confronts us again with the possibility of purely internal growth. But the archaeological evidence pointed to above, and what is known of theogony in general, would make it extremely unlikely that a multiple-headed god was invented out of nothing by the Brahmin class as their own special creator. The alternative interpretation is that one aboriginal Brahmin god at least survived in their memory, and was re-adopted into the new pantheon after the priests had become Aryanized. The Brahmin demon Rāvaṇa killed by Rāma had sprouted as many as ten heads!

Bṛhaspati is not the only god to grow out of comparatively brief mention in the *Ṛgveda* into quite overpowering glory. Viṣṇu is a known example, and Puruṣa in x.90, even more striking as Nārāyaṇa. These are clearly foreign additions to Aryan cults, but a parallel to Bṛhaspati is better seen in Prajāpati. He begins as an adjective, being Savitṛ in iv.53.2, and Soma pavamana in ix.5.9. A cow has been given by Prajāpati in x.169.4 and x.184.4 addresses to him part of a prayer for offspring. The very late x.85.43 shows him as a god. An entire hymn is dedicated to him only in x.21, where he is mentioned in the last *ṛk* by name; later comment has made the interrogative *kaḥ* of the refrain into a name for Prajāpati, perhaps from ancient memories of the significance of the word as a man's soul or essence (as it also was in Egyptian). The crowding into the last books is clear proof of a later date than for Bṛhaspati.

Memories of Brahmanical adoption of strange ways in distress survived quite late. We know that the ascetic tradition in India goes back to a period far earlier than that of the Buddha, and that many of these ascetics were specially learned, as well as versed in the mysteries. For a development purely within the jungle, this would be impossible. On the other hand, if some of the (originally) unassimilated and unenslaved priestly survivors of the pre-Aryan culture took to the forest and eked out a painful existence on the margin of slowly growing settlements, the high respect accorded to ascetics is explained, as well as the gradual merger of the two streams in later philosophy. *Manusmṛti* 10.108 speaks of Viśvāmitra accepting dog meat from the hands of a Cāṇḍāla, but there is no Vedic support for this, and as the book is of Bhṛgu redaction (*Ms.* 11.59–60), we may pass this by. The two previous *ślokas* are confirmed. *Ms.* 10.107 proclaims that hungry Bharadvāja, with his son, received many heads of cattle from Vṛdhu Takṣan. The reference is found in the *Ṛgveda* (vi.45.31–3) in a genuine Bharadvāja *dānastuti* of king Bṛbu, the most generous of princes, who victoriously achieved chieftainship of the Paṇis like Urukakṣa Gāṅgya. When we recall that the *Ṛgvedic* Paṇis are regularly maligned as greedy, mercantile, and even cattle-stealers (x.108 gloss) Vṛtra himself being a Paṇi at times, or that they are demons—which means old enemies of the Aryans, it is clear how Bharadvāja had sinned. However, he had another Aṅgiras predecessor, Vāmadeva. *Ms.* 10.106 tells us that starving Vāmadeva was unstained by eating dog's flesh, and this is again supported by a *ṛk* of Vāmadeva (iv.18.13) where the seer narrates that in distress he was reduced to seeing his wife in degradation, and to cooking a dog's entrails. But this is no less a *dānastuti* of Indra, in older form, than Bharadvāja's to Bṛbu; for Vāmadeva concludes that then the Falcon (Indra) brought him Soma. This can only mean granting the right to Soma, which implies granting membership in the tribe, i.e. adoption as an Aryan follower or priest of Indra. Says Vāmadeva (iv.24.10) 'Who will buy from me, for ten cows, this Indra who is mine? After he has defeated the enemies, let him return (Indra) to me'. This has been interpreted as hawking an image or fetish of Indra for hire, a unique practice in the *Ṛgveda* not supported by any authority. But hiring out the ṛṣi's services for a specific occasion, to secure the aid of Indra in battle, would seem far more natural, would fit the context of the hymn better, and is also the traditional Brahmin practice. Getting Indra back is essential; 'What use to you (Indra) are the cows of the Kīkaṭas' (iii.53.14) shows such an attempt at enticing Indra away from others. As for the specific mention of those who did not believe in Indra, we have two quite distinct classes: those who are the enemies belonging to the aboriginal population (vṛtras, dasyus, etc.) and those who are treated with more circumspection though denying Indra, as in ii.12.5, viii.100.3. These might be *vrātyas*, extra-Vedic though Aryan, but later tradition like that of the *Bṛhaddevatā* says explicitly that the reference is to particular seers, Brahmins who had once denied Indra and then 'seen', i.e. acknowledged him. There is no reason to doubt this, and it supports our main contention.

This tale of woe, being found in all layers of the *Ṛgveda*, is no later invention; x.33 begins as a song of hunger by one who has barely escaped death by starvation. The numerous *dānastutis* cannot be separated (as done so often by Grassmann) from the hymn proper. In the first place, similar praise is found in the body of other hymns, in the same metre. Secondly, Malinowski's experience with Trobriand Islanders' folklore shows that the coda is an integral part of the story, prime cause of its preservation. The record of gifts to the singer could have been important only if they were comparatively rare, life-saving events whose chanting was at once grateful remembrance and incentive to other donors. The properly historical names of the *Ṛgveda* occur for the greater part in such *dānastutis*. One can see groups like the Bharadvājas and the Kaṇvas cast about for protectors among all sorts of chieftains. Even the two *dāsa* chiefs Balbūtha and Tarukṣa are praised to the utmost by Vaśa Aśvya, and it is their generosity to him that, presumably, brings them under the grace of Indra and Vāyu in viii.46.32. This, incidentally, shows that Brahminism cannot be a purely Aryan growth. Thus the hostility to Yadu-Turvaśa (vii.19.8) and friendship in vi.20.12 are explained because Vasiṣṭha and Bharadvāja were then priests to different, hostile tribes, and called upon Indra to support their own party. The all-importance of giving to Brahmins, so nauseatingly familiar to any reader of classical Sanskrit, goes to iv.50.7–11 (which would fit into any *Purāṇa*) and is the economico-theological basis for the priest's special sanctity and development into a caste apart.

Most important of all, these appended verses of gratitude *provide the transition between fixed, sacred hymn, and improvised, 'fluid', popular lay*; hence the deliberate change of metre in the *dānastuti*. The *Mahābhārata* epic, for example, is a re-edited collection of such lays about the main theme of a great civil war. Every digression (particularly genealogical) called for by any of the characters is made at once, which is clear proof of improvisation. The prologue has a Vedic hymn to the Aśvins (*Mbh.* 1.3.60–70; not out of place in the context) and claims that the work is a Veda, which could hardly be admitted on the strength of a solitary hymn. One may therefore conclude that the glorifications (*māhātmya*) which intersperse the various episodes, telling of immense merit to be gained by listening to the particular story recited, make up for the disappearance of other hymns with which the minstrel must, in older days, have begun his set portion; the *māhātmya* is a later guarantee that the sanctity originally provided by the hymn has somehow been preserved. The *Mbh.* being of Bhṛguid recension, with a fragment surviving of a rival complication by Jaimini, we have here another encroachment by Brahmins; the professional bard (*sūta*; one actually recites the extant *Mbh.* according to the work itself) is of mixed caste—son of a Vaiśya by a Kṣatriya woman—which points to an ancient respectable origin of the guild, before class differences had developed into impassable caste barriers. The idea of caste-mixture is the *Manusmṛti* method of enrolling such guilds into the caste system. The cheerful poet of ix.112.3 says: *kārur aham tāto bhiṣag upala-prakṣiṇī nanā*, 'I am a hymn-composer, father is a herb-doctor, mother grinds corn', all as professionals, for profit; this is certainly not the *Manusmṛti* idea of a family. The irregularities of *Mbh. triṣ ṭubh* metre approach the Vedic rather than later classical models. I suggest that the long tradition of free improvisation accounts in greater part for the 'fluidity' of the epic text as compared with the rigidly fixed Veda or Pāṇinian *Aṣṭādhyāyī*, though all three were orally transmitted for a while, and the two last for a much longer period than the growing epic. Vyāsa's stepping out of the role of poet to direct the actual characters of the epic may indicate some sort of stage-direction and the acting of scenes to accompany the recitation; this would account for the miming of Bharata-yuddha episodes in Balinese tradition, derived from south-east India.

Triśiras as Pure Myth

12. The proposition must now be considered that all *Ṛgvedic* stories are pure myth, from which no historical information is to be derived. The very survival of a myth indicates the existence of a class of people interested in repeating it till such time as it came to be recorded. Generally, in primitive societies, this implies connection with ritual and the priesthood that survives by performing that ritual. The existence of an early written version of the *Ṛgveda* is extremely unlikely, though not absolutely impossible; Indic as well as extra-Indian Aryans had had violent contact with ancient literate civilizations. Writing was unnecessary at the intermediate pastoral and pioneering stage, from which settlements gradually arose to develop into kingdoms of an entirely different type. The priesthood was all the more necessary, and there is no reason to doubt the generally accepted theory of an entirely mnemonic transmission of the oldest Veda in its early days. The point, however, is not material in our case.

Identification of ancient city ruins in the Indus valley with Dasyu cities destroyed by Aryans can no longer be stigmatized as Euhemeristic. Thus, the ritual that developed at the earliest period could not be the *Yajurvedic*-Brahmanic rite but something connected with, or influenced by, these clashes. The later Veda preserves little or no trace of this, even in symbolic form, simply because the social, political, and economic situation had changed completely. Looking specifically at the story of Indra (or Trita-Thraetona) striking off the three heads of Tvāṣṭra, we find its narration and survival almost a casual feature of the *Ṛgveda*. Later Vedas use it only to introduce more prominent stories, such as the killing of Vṛtra, which motivate purification and Soma ceremonies. Therefore, the initial ritual, if any, has faded. Yet we have the three or four-faced god and several three-headed beasts on Mohenjo-Daro seals, as well as broken images with a human torso and one or more head-sockets. Moreover, the *trimurti* continues to this day, with a totally different theology, as representing a deity synthesized from three later gods, of whom the four-headed Brahmā is one (though allotted only one of the three heads). Finally, there is now no striking off the heads of the image, which shows that both ritual and myth follow changes in the relations of production. If the Tvāṣṭra story indicates any Aryan ceremonial, it can only be the killing of a priest by the king, for priestly gentes continue to derive their name from Tvāṣṭra, even from his severed heads; the line of descent from Brahmā at the end of *Bṛhadāraṇyaka Upaniṣad* IV shows two Tvāṣṭras.

But the only other such parallel story is the striking off a horse's head from Dadhyañc Atharvan (also in that line of descent), which head continues to be immortal and prophetic in lake Śaryaṇāvant, and from which perhaps Indra fashioned a powerful weapon, like Samson from the jawbone of an ass (*Bṛhaddevatā* iii.22–3; *RV.* i.84.13–14; *Śat. Brāh.* xiv. i.i.18–25). This is the exact opposite of what has been propounded about such myths:[33] That they represent the periodic sacrifice of a king. Here, instead of the priest sacrificing the king, it is the god-king who beheads his own priest. This cannot be taken as yet another Brahmin inversion, for the Vedic priesthood grew steadily in power, and there is no reason for it to have taken a step against its own inviolability. The killing of Vṛtra might conceivably be related to a periodic human sacrifice, seeing that Vṛtra also denotes dark non-Aryan enemies; whence some ritual for victory over them, or sacrifice of prisoners after a battle, would not be unlikely. For Tvāṣtra, no such explanation seems to be possible.

Study of the Iranian counterpart Azi Dahāka shows us that we have to do with a non-Aryan king or priest-king. The motif of an initially monstrous king is strong enough to reappear in India down to Śiśupāla, king of a historical people Cedi. He is three-eyed, which is really equal to three-headedness, as will be seen, and four-armed at birth; killed by a later god, the dark Kṛṣṇa, after many trespasses have been forgiven. It is possible to conclude, following the reasoning of those who favour such analysis, that *the myth portrays, in its initial stages, the killing of a pre-Aryan priest-king somehow connected with the later Indo-Aryan priesthood.* The killer does not succeed to, but retains, sovereignty over the Aryan pantheon. There is nothing like a sacred marriage connected with the story, and the patriarchal society of the *Ṛgveda* does not allow anything of the sort to be fitted in. Later antagonism between *Kṣatriya* and *brāhmaṇa* can explain neither the formation of the story nor its Iranian version, supplying at most a cause for its repetition, or for the usurpation by Bṛhaspati of some of Indra's saga. Thus, the 'ritual' is at best adopted from the pre-Aryans, which would normally imply adopting some of the priesthood therewith.

It seems much more reasonable to admit what has already been demonstrated for Greece:[34] That conflict between gods indicates conflict between two or more cultures which were thereafter fused. In India, this fusion did not go to the extent of continuing the urban life of the older period, though that was essentially what other Aryans did further to the west. Had the amalgamation achieved nothing more than the formation of a helotage (the Śūdra caste) from the conquered black Dasyus, there would be no such indelible mark left upon the Brahmin priesthood and tradition. Moreover, there is ample evidence for the existence of dark-skinned Brahmins in antiquity, the possibility being also admitted by Buddhists (*Dīgha Nikāya* 4) but not by Brahmins from the northwest (*JBBRAS*. vol. 23, 1947, pp. 39–46); such clear evidence of racial admixture did not lead to any loss of caste. This completes the alternative line of reasoning, bringing us to the same point as before.

Survivals of Mother-Right in the Ṛgveda

13. The question of matriarchy[35] and group-marriage has only been skirted in the previous sections. I now propose to show that even in our oldest available documents there exists clear evidence to support our arguments, without violence to logic and with improved meaning. Such re-interpretation is necessary as the original simple meaning had become incomprehensible in the intervening millennia of a totally different form of society. Following the Vedas, epics, *Purāṇas*, *Gṛhya-sūtras*, and *smṛtis* in chronological order, we find at times a reversal in the accepted sequence of development. Matriarchal features appear later, as for example *strīdhana* (property inherited in the female line), and recognition of consanguinity on the mother's side. These are due not to retrogression in the means of production but to absorption of the remaining pre-Aryans by comparatively peaceful methods. Matriarchy and the most primitive forms of exogamy are known to survive only among the least Aryanized of India's tribes. The leading *Ṛgvedic* gods Agni, Vāyu, Varuṇa, Mitra have no real consorts, for Varuṇānī, Agnāyī etc. (like the male Sarasvat for Sarasvatī) are palpable fictions which never took hold; the noticeable fact is that they should have been thought necessary at all. The slightly better drawn Indrāṇī (x.86) never establishes herself in the pantheon. Viṣṇu develops his supreme importance only in the later period when he has already married the sea-born Lakṣmī. Śiva-Rudra can become the great god because of his wife Pārvatī; he has often to appear as a hermaphrodite assuming half her body, so essential is her cult. The conclusion is irresistible that these divine marriages not only represent the fusion of the invaders with a set of predominantly matriarchal pre-Aryan peoples, but even that the absence of such cult-fusion helps Buddhism push the older unmated Vedic gods into the background, in spite of the grip maintained by Vedic ritual. For direct reference to an earlier stage without forbidden degrees of marriage, we seem to have *Ait. Brāh.* iii.33.1 which speaks of everything as created out of the incest of Prajāpati with his own daughter. The incest, without naming Prajāpati,

goes back to *RV*: x.61.5–7, and must be much older. *Ait. Brāh.* vii.13 even says, 'therefore a son his mother and sister mounteth,' though such promiscuity must have belonged to a distant and repugnant past of the contemporary Aryans as shown by the Yama-Yamī dialogue. The sun-god Pūṣan is called 'lover of his own sister' in vi.55.4–5, while the gods actually marry him off to the sister Sūryā in vi.58.4. Both the Achaemenians and the Śākyas had traditions of brother-sister marriages. In the *Ṛgveda* the minor canine goddess Saramā (x.108; i.62.3; i.72.8; iii.31.6; iv.16.8; v.45.7–8) finds stolen[36] cows as messenger of Indra. The termination *mā* was not understood by the later priesthood except as a negative injunction, depriving the name of all meaning. But the list of female deities or demons whose names so terminate increases immediately after the *Ṛgvedic* period: Umā, Ruśamā (*Pañc. Brāh.* xxv.13.4), Rumā, Pulomā, Ramā, Halimā (*Mbh.* 3.217.9) etc; they are undoubtedly mother-goddesses[37] at one stage of their mythological existence. In x.40 the levirate is clearly mentioned: *do vā śayutrā vidhaveva devaram maryam na yoṣā kṛṇute sadhastha ā*, but the very word for widow and the institution of widowhood shows us that the Aryans had long shaken off their own traditions of group-marriage and mother-right. Therefore, the direct references from the *Ṛgveda* which are cited in the following paragraphs are much more likely to represent absorption of pre-Aryan custom than an uncalled-for reversion to ancient practice.

My main argument is the following. A single child with many mothers is characteristic of a society in which group-marraige is the rule. 'A child gives the name of mother not only to her who bore him but also to all his maternal aunts. A European not familiar with these relationships is surprised when he hears a native (of New Britain) boasting of having three mothers. His confusion is increased when the alleged three mothers stoutly assert '*amital qa kava iva*, all three of us bore him'. This is quoted from J.G. Frazer's *Totemism And Exogamy*, (London 1910, vol. 1, p. 305, footnote), being itself apparently taken from P.A. Kleintitschen's *Die Küstenbewohner der Gazelle-halbinsel*. We shall now proceed to show just this attitude in some hymns of the *Ṛgveda*. It may be objected that a plurality of mothers may indicate only polygamy. A moment's thought will make it clear that in a polygamous gentile patriarchal society, the father's *gens* and the mother's *name* become important; this is precisely what we do find in the oldest Pāli literature.

The usage in question—a single child with several mothers—is found explicitly in vii.2.5: *pūrvī śiśum na mātarā rihāṇe*; i.140.3: *tarete abhi mātarā śiśum*; and in viii.99.6. The plural or dual 'mothers' in the sense of parents is excluded, though even this would be highly significant. Pāṇini vi.3.33: *pitaramātarā ca chandasi* only shows that the compound could be used in the dual sense, as in *RV*. iv.6.7: *na mātarāpitarā*, to mean parents. By itself, *mātarā* as dual would at least indicate two mothers, which suffices for our purpose. Where a specific interpretation is given (as occasionally by Sāyaṇa) we have the parents as the sky and earth: *dyāvā-pṛthivī*; but both are feminine and x.64.10 calls the great sky also a mother: *uta mātā bṛhad-divā*. The common Sanskrit appellation for ancestors is *pitaraḥ*, 'fathers', showing how natural patriarchal usage had become. Correspondingly, we have the masculine 'father sky' *dyaus-pitā* (i.90.7; i.164.33, etc.) as in Greek, and Latin. Why should this one god common to all known branches of Aryan mythology appear as a *mother* so often in the *Ṛgveda*?

Soma had several mothers: *tvām rihanti mātarāḥ* (ix.100.7; also ix.111.2). In fact he was born of seven mothers, ix.102.4; *Jajñānaṃ sapta mātarāḥ* who are sisters, ix.86.36: *sapta svasāro abhi mātaraḥ śiśuṃ navaṃ jajñānam*. These seven mothers are presumably the seven rivers: (i.158.5) *nadyo mātṛtamāḥ*; i.34.8: *sindhubhiḥ saptamātṛbhiḥ*. The point is that they jointly bear a single child while there is no mention at all of the father in spite of the patriarchal nature of the society in which these hymns were chanted; note again that the Greek rivers were masculine. Further, though a river is very useful to pastoral nomads, the superlative worship in *ambitame nadītame devitame Sarasvatī* (ii.42.16, 'o most excellent of mothers, rivers, goddesses, Sarasvatī') seems characteristic of the pre-Aryan riparian urban cultures. The connection between *ambā* = mother and *ambu* or *ambhas* for water is neither fortuitous nor to be explained psychoanalytically in this case but a fundamental attitude to be expected among people whose entire civilization owed its birth and its existence to the river. The primary sanctity of a river like the Ganges as a cleanser of sin belongs to a later period of Brahminism, though apparent even in x.17.10. These river-mothers might be meant in the famous line *yahvī ṛtasya mātarā*[38] (v.5.6, x.59.8; ix.102.7; ix.33.5; 142.7, and vi.17.7 with the added qualification *pratne* = ancient) 'the never-resting mothers of truth' (or justice, *ṛta*; but note that Sāyaṇa on v.12.2 takes *ṛta* to mean water). The cult of the Mothers did exist, and was very ancient; if derived from that of the rivers, one would expect the process to have taken place among people who still retained the matriarchal stamp.

The most interesting fact about such a multiplicity of mothers is its consequent effect upon the child. The deified fire, Agni, is also born of several mothers (x.91.6), specifically the seven blessed mothers (i.141.2), without an apparent father. We remark parenthetically that the fire-drill and the simpler fire-plough have only two essential components, the 'parents' of the fire generated by their friction; the comparison with human procreation is so natural that both portions of the *araṇī* are not generally regarded as mothers. Fire is described in one place as seven-tongued (iii.6.2), a natural figure of speech for the flames. But one hymn earlier we have Agni as with seven heads (iii.5.5): *pāti nābhā sapta-śīrṣāṇam agniḥ*, in one of his forms at least. Thus it is logical to find that Soma also have seven faces or mouths in ix.111.1.

The correspondence of one head per mother can be still better proved from a myth which has been recorded later, namely the birth of Skanda (*Mbh.* 3.214 ff). He has actually six mothers, the pleiades, whence his name Kārttikeya. But his other name *ṣāṇmātura* clearly means 'with six mothers', and he has six heads: one from each mother as we are told explicitly in most accounts of his birth. The *Mahābhārata* story is a bit mixed in its details, saying that he was fathered by Agni who was enamoured of the seven wives of the seven ṛṣis (identified with components of Ursa Major; these 'husbands' are presumably later, seeing that they never gain the importance of the Mothers, nor of the collective Vedic gods like the Maruts, Rudras, Vasus). Agni's rejected wife *svāhā* (merely the sacrificial call) then successively assumed the form of six of these seven ladies to couple with the fire-god; the combined semen was poured into a lake to generate the dread Skanda. The duplicated ṛṣi-wives are cast out on suspicion of unchastity, and adopt Skanda as his mothers. The great Mothers (of the whole universe, but seven in number) are asked to kill Skanda, but they too adopt him jointly instead. The story is an obvious effort to combine several versions into one while retaining and explaining away the six mothers with no particular father. Skanda being identified with a form of, or oftener as son of Rudra, we have a still later *purāṇic* story wherein he is begotten of the seed of Śiva which Pārvatī forces upon Agni in her anger at the interruption; this forms a sort of prefatory addition to the other story.

Sarasvatī is obviously given as son or consort[39] of the river goddess Sarasvatī, just as Dakṣa is both father and son of Aditi. The confusion, natural consequence of development from matriarchal cults, suggests the identification of Tvaṣṭṛ with Tvāṣṭra, at least in principle. Gods with several heads would be associated with the cult of several confluent rivers. To continue: *Ṛgvedic* Viṣṇu has a wife (*sumajjānaye viṣṇave*, i.156.2) and several mothers (iii.54.14) while viii.20.3 equates him to Rudra and the much later *Viṣṇu-smṛti* (1.56) calls him Saptaśīrṣa without explanation. Both blocks of the firedrill can simultaneously be *mothers* of Agni (v.11.3). Thus Agni or his heavenly representative the sun (born of heaven and earth) is *dvimātā* in i.31.2; i.112.4; iii.55.6–7; he is three-headed in i.146.1 but more naturally four-eyed in i.31.13 and *diviśīrṣa* in the *Śabdacandrikā*. The elephant god Gaṇeśa is also *dvaimātura* (*Amarakośa* 1.1.140). The Bṛhadratha king Jarāsaṃdha was born of two sisters, in two separate halves later joined together (*Mbh.* 2.16.12–40), which rationalizes the two-mother tradition. Rāma emulates Indra and Thractona in killing a three-headed demon Triśiras (*Raghuvaṃśa* 12.47; also *Rāmāyaṇa*). The *Śabdakalpadruma* refers to *Kālikāpurāṇa* 46 where Hara is called Tryambaka for having been born of three mothers. Böhtlingk-Roth give Triśiras as an epithet of Kubera (whose three legs relate him to the triskelis and the three-strider *tripāda* Viṣṇu) as well as Śiva who in turn is made four-headed in the Tilottamā episode (*Mbh.* 1.203.26) and known both to literature as well as iconography in a five-headed *pañcamukha* form. Nāgas with two, five, seven heads occur in *Mbh.* 1.52.20, carrying us back to Mesopotamian seals. Even the old Aryan god Varuṇa is once called four-faced (v.48.5 *caturanīka*), and again lord of his seven sisters (viii.41.9) thus substituting for some pre-Aryan deity; Indra as *saptahā* (x.49.8) was too open an enemy (cf. viii.96.16) for this assimilatory treatment. The names Navagva and Daśagva, meaning of nine and ten parts respectively, give clear indication of ancient *Ṛgvedic* groups of nine of ten priestly clans of equal status with the oldest Aṅgirasas (x.62.6; the Navagvas are against Indra in i.33.6?). Yet each is used often in the singular as representing the conjoint group. This could easily arise from or give rise to the many-headed representation, as for example the 'first-born' ten-headed Brāhmaṇa of *AV.* iv.6.1, or a seven-faced Daśagva Aṅgiras in iv.51.4. Tvaṣṭṛ creates Bṛhaspati from the essence of everything (ii.23.17) and also creates fire (x.2.7; x.46.9; ii.1.5); but the latter embryo is generated by ten maidens (i.95.2) symbolizing the fingers that twirl the fire-drill, reminiscent of the Vestals. Agni is three-headed and *saptaraśmi* in i.146.1, just as Tvāṣṭra is in x.8.8; Bṛhaspati is *saptaraśmi* and *saptāsya* in iv.50.4. As for mother-right, Namuci's army recruited women (v.30.9) to the derision of Indra. The Mothers join Skanda's army (*Mbh.* Vulgate, Śalyaparvan), and have still to be propitiated by his worshippers. The cow-mother Pṛśni is mother of the Maruts, and in viii.101.15 'mother of the Rudras, daughter of the Vasus, sister of the Ādityas' yet never rises high in the pantheon. In view of this rather mixed theogony, not much can be made of the phrase *śivas tvaṣṭā* in the *āprī*-hymn v.5.9, for Indra is called *śivatama* in viii.96.10. Indra is also *ajātaśatru* (v.34.1, viii.93.5), *bhīma* in many places, even *viṣṇu* in i.61.7 and perhaps *rudra* in viii.13.20. That is, many of the later god-names are pure adjectives so that the fact of a god having a good Sanskrit or Indo-Aryan name does not necessarily make him a god of the Aryans from his beginnings. Even the solitary occurrence of *Lakṣmī* (x.71.2) in the *Ṛgveda* is as an adjective.

The clumsily patched Skanda legend with its gaping seams is particularly revealing. Without it, we should have assumed, as is done for the modern *trimurti* and Dattātreya, that a multiple-headed god is merely the fusion of that number of male deities, i.e. of their cults, leaving the ancient Brahmā unexplained. But let us first look at the completed patriarchal transformation of such multiple parentage. The introduction of Agni in the Skanda story takes us only half-way. We have noted that two great *gotra*-founder ṛṣis with fictitious names, Vasiṣṭha and Agastya (also known as Māna), are born of the combined seed of Mitra and Varuṇa, from a jug or a lotus: two fathers but no mother; this method of generation appears down at least to the *siddha* Bhartṛhari, Bharatarī or Bhartri of the Kānphāṭā sect. The essential is the denial of a mother,[40] these great men being *ayonisaṃbhava*, not of woman born. I suggest that this ingenious device became necessary because a patriarchal society had invaded and conquered by force, but these ṛṣis became nevertheless 'originators' of *gotras*. Later the seven sages are born directly of the four- (in some versions even five-) headed god Brahmā, without female intervention. Yet the names of the 'seven' are seen to be discordant among the various lists, while the one sage not born of Brahmā at all is *kuśika* Viśvāmitra, the only true Aryan *gotra*-founder. He is really a stranger to the seven, even though his book in the *Ṛgveda* is permeated by Jamadagni influence. Now not only do the seven mothers, the river-goddesses, continue to hold their high position in the *Ṛgveda*, but the divine representative of the priesthood, Bṛhaspati, is several times called seven-faced (iv.50.2 etc; Sāyaṇa often takes *saptāsyas* as denoting the Maruts, fathered by Rudra). The conclusion is that *a pre-existing matriarchal form of society shows itself through the myth of several mothers jointly giving birth to a god with an equal number of heads of faces. These mothers, as representatives of local tribes or gentes, are later replaced by eponymous Brahmin ancestors, the ṛṣis.* Indus valley seals show male animals (single and multiple) which may be interpreted as totemic. The polycephalic god is also present and the civilization has therefore *started before and gone beyond* the stage of pure worship of his mothers, the rivers or other goddesses. It will be objected that so highly developed a civilization could not have retained matriarchal tradition to such an extent as our analysis requires, but actually there is nothing against it. The main conditions are a relatively undisturbed and rapid advance from the primitive to the urban stage, made possible by the river and its isolating desert; further, the comparative unimportance of fighting and the warrior in the development of the civilization. Archaeology, though incomplete, supports this, whatever the means (naked force, or religion) adopted by that extinct society to preserve internal class divisions; the transformation of the many-headed god into Bṛhaspati and Brahmā suggest religion rather than violence. Even in the epic period, rivers continue to bear heroic sons; the great figure of the *Mahābhārata* war, Bhīṣma, is born of the Ganges and a human father, Śāṃtanu.

Turn now to Triśiras Tvāṣṭra. This personage is supposedly the son of the ancient creator-god Tvaṣṭṛ; a priest—though the father is nowhere called that—whence it is a sin to kill him; and in some way an immortal god-priest or else the hymn describing his own killing (x.8) could not have been ascribed to him against all reason by the *Anukramaṇī*. The 'father' Tvaṣṭṛ is later enrolled among the Ādityas as well as among the Rudras; he shares the adjective *viśvarūpa* with his son, but has not three heads. Nothing is said about the mother who bore so remarkable a son, one who is associated with rivers in the form of 'snakes' springing out of his shoulders, as we have seen in Iranian legend. One would guess that he is the son of three mothers, whether also of Tvaṣṭṛ or not. It cannot be a mere accident that we find another (nameless) god with three mothers, of whose father there is no mention at all, and who is early identified with Rudra. This is Tryambaka = 'with three mothers', worshipped according to vii.59.12: *tryambakam yajāmahe sugandhiṃ puṣṭivardhanam*. The *Taitt. Saṃ*. i.86 calls Tryambaka Rudra and tells us that his animal is the mole. Later we have Tryambaka translated as 'three-eyed', for which there is no philological support but which does serve to eliminate the three mothers; it also explains the three eyes of Rudra-Śiva. We have another reference in ii.56.5: *uta trimātā vidatheṣu samrāṭ*, to an unnamed god (probably Agni) who has three mothers and is supreme in the divine assembly; the hymn, it will be reaclled, deals with several triple deities. This *trimātā* is glossed by Sāyaṇa as *trayānāṃ lokānāṃ nirmātā*, creator of the three worlds; which, though silly as an explanation, gets rid of the awkward and incomprehensible three mothers while showing that the reference was supposed to be to some high god. The conclusion is again that one branch of culture contributing to the *Ṛgveda* had a living tradition in which maternity could be joint and paternity quite unimportant. It is for this reason that Tvāṣṭra's severed heads could give names to Brahmin *gotras*, for they must actually represent matriarchal gentes to begin with. It is not the mother-goddess who has three faces, like Hecate or Artemis among the Greeks, but the son born of three mother goddesses. Just what ancient chain connects our myth to the story of Herakles killing the three-headed Geryon, capturing Kerberos, or decapitating the Hydra we cannot consider here, for we have not as yet enough glyptic evidence from the Indus and Mesopotamian regions.

This can be rounded out by other myths, usually dismissed as trivial but which can now be seen to form connective tissue in the body of Vedic mythology. Indra drank the *soma* by force in Tvaṣṭṛ's house (iii.48.4; iv.18.3) thus presumably thrusting himself upon Tvaṣṭṛ's tribe, or depriving him of power, or both. It is thought by some that the father whom Indra took by the foot and smashed (iv.18.12) is Tvaṣṭṛ himself, but this is highly improbable. Indra's father is nowhere named, (nor is Indra reported anywhere as assaulting Tvaṣṭṛ) and his mother is doubtful too, though he is enrolled among the growing list of *ādityas*, sons of Aditi. The later *āditya* par excellence is the sun, while the first is Varuṇa; both Tvaṣṭṛ and Indra occur in a continuously expanding list, and it is not clear that Aditi was a pre-Aryan mother-goddess, being once even cited in the masculine gender. The later *Pañcaviṃśa Brāhmaṇa* (xii.5.18–22) reports that Indra suffered from eye-disease after killing Vṛtra, and was lulled to sleep by the daughters of Tvaṣṭṛ. These daughters generate fugitive Indra from the cows in which he had hidden himself; parallel versions show that the cows themselves are the daughters of Tvaṣṭṛ, so that the whole story is perhaps one of rebirth from several mothers, i.e. adoption. One may note that Durgā is called Tvāṣṭī (for Tvāṣṭrī) in the still later *Devīpurāṇa*, and a living cult of Tvaṣṭṛ (or his son?) seems indicated only by the *Pāraskara Gṛhya-Sūtra* ii.15.5. The adoption of Indra by the daughters of his predecessor is meaningless by patriarchal standards; either Tvāṣṭṛ or his son would have had to adopt the war-god for its validity. What we do see is that not only did Aryans adopt some pre-Aryan Indic gods but assimilation in the opposite direction was also attempted. As for the three heads of Tryambaka becoming three eyes, we have a distant parallel in the Tvāṣṭra story. *Śat. Brāh.* iii.1.3.12–17 says that a special eye-ointment from mount Trikakuda must be used. Trikakuda means with three peaks, points (or even heads). The mountain was the transformation of Vṛtra's eye after that demon had been killed by Indra; but Vṛtra was the demon created by Tvaṣṭṛ to avenge his sons' murder by Indra. So the cycle is complete. The variant details of this and other similar narratives show that some background story which could not be forgotten was adopted by several different people at various times for Vedic purposes; the principle is the same as that of the starred reading in text-criticism, on a different level. It is at least plausible that this faded craftsman-god Tvaṣṭṛ who is identified as creator with Varuṇa (iv.42.3) as well as the later Prajāpati, who appears as a Rudra as well as an Āditya, and who is connected with multiple-headed gods from Triśiras to Bṛhaspati, is not originally an Aryan god with fixed position in the pantheon, but a figure from the pre-Aryan background which could not be suppressed altogether in spite of his conflict with Indra.

The three possible mothers of Triśira could very well be the original of a female triad which occurs repeatedly in the *Ṛgveda* (i.188.8; ii.3.8; iii.4.8; x.110.8), Iḍā, Sarasvatī and Bhāratī. The last is the earth, perhaps here as a special goddess of the Bharatas. Iḍā is also the mother of Agni (iii.29.3) as personification of the lower wood of the fire-drill. Most important of all,· she is the mother of Purūravas (x.95.18). Since this Purūravas is virtually the founder of the lunar line of kings, we have a complicated set of purāṇic legends making Iḷā a *son* of Manu, but transformed into a woman by stepping into a grove sacred to Pārvatī. The original legend had to be twisted, presumably because a line in the patriarchal world cannot be properly founded through a daughter of Manu. We have already seen the prototype of the metamorphosis in the ambivalence of the sky-god or goddess and such changes of sex are far too common. Indra himself (i.51.13; *AV.* vii.38.2. *Śat. Brāh.* iii.3.4.18); Āsaṅga-Plāyogi (Sāyaṇa at the beginning of viii.1, and the *Sarvānukramaṇī*; *Bṛhad-devatā* vi.41); Nārada, king Bhaṅgāsvana (*Mbh.* 13.12, vulgate) and the 'monkey' Ṛkṣarājas (in a probably apocryphal addition to the *Rāmāyaṇa*) after bathing in enachanted pools; Śikhaṇḍin who killed Bhīṣma (originally and significantly named Ambā in a previous birth) all change sex, and sometimes both beget and bear children. The roots go very far back, for the Tiraścī of viii.95.4 is the seer of the hymn, but the name is feminine in declension and masculine in usage. The grove and particularly the pool which effect the metamorphosis (which will be found even in a tale of the *Arabian Nights*, and the *Qissah Hatim Tai*) has sometimes been equated to the fountain of youth, as with the rejuvenating immersion of Cyavana.[41] The actual transformation in the first instance being from male to female, they are much more likely to represent places dedicated to the mysteries and initiation rites connected with the cult of one or more mother-goddesses—places which men could enter only to emerge emasculated, performing thereafter the functions of women, presumably in the service of the goddess. Some such pre-patriarchal initiation must be the proper explanation of the verses at the end of viii.33, particularly 19: *strī hi brahmā babhūvitha* 'thou, O priest, art become a woman'.

The foregoing, I believe, will suffice to show how correct and useful a guide Engels's *Origin of the Family, Private Property and the State* has been, though we cannot follow it slavishly because the story before us is that the violent overthrow of a great pre-Aryan culture and its traditions. A few speculations may not be out of place. Widow Ghoṣā sings of the Aśvins (x.40.8) opening the 'seven-entrance' cattle-pen to the thunderer: *stanayantaṃ vrajam apa-ūrṇuthaḥ saptāsyam*. The word *saptāsya* is already familiar to us; seeing that *vraja* and *gotra* are originally synonymous, we may guess that the meaning of gens, tribe, or amphictyony could be used for the former here. If so, the line speaks of Indra being admitted to the fold of the seven ṛṣis, or the tribes descended from the seven rivers; the Aryan set is generally of five peoples, the *pañca janāḥ* whose individual names are lost; curiously enough, *saptahā*, seven-killer, is a title of Indra (x.49). Again, Indrāṇī, the goddess who proved theologically not viable, participates in a mysterious and sometimes erotic triangular discourse which is the more notable as the gods' wives are generally called *gnās* in a group and remain silent, being under the special protection of Tvaṣṭṛ. Indrāṇī, in the one chance given her, speaks of women having gone to ritual celebrations in 'older times': *saṃhotraṃ sma purā nārī samanaṃ vāva gacchati* (x.86.10). The very next *ṛk* speaks of her husband as never dying of old age: *na hy asya aparaṃ ca na jarasā marate patiḥ* (x.86.11). The *Ṛgvedic* evidence wears thin here. Yet it is difficult not to think of goddesses and queens in other countries whose husbands never reached old age, being sacrificed in fertility rites before their vigour began to wane. Was this some older goddess of that type (she is addressed as mother in x.86.7 and occurs in one list of the Seven Mothers) thrust briefly upon Indra? The famous *Puruṣasūkta* (x.90) speaks of creation as resulting from the sacrifice of a male god. The late hymn is purely Brahmanical, as it is unique in mentioning the four castes but the rite it represents is unquestionably very old, and there ascribed to pre-Aryan gods, the mysterious Sādhyas. Still better for our purpose is the dialogue (x.95) between the nymph Urvaśī and her human lover Purūravas son of Iḍā, which gave rise to a popular classical theme. The *sūkta* is not literally comprehensible if taken as the commentator interprets it, for Urvaśī is supposed to be merely hard-hearted in repulsing the advances of a human lover with whom she breaks off her temporary union. He is gratuitously promised heaven after death, his argument that his son will feel the absence of a father is brushed aside, and she asks him to go to his *asta*, home. As he is himself the son of a great goddess, there is no apparent harm in the permanency of their union which he desires; Thetis could mate with Peleus. Nor is it clear why Urvaśī emphatically calls him *mṛtyubandhuḥ*, one doomed to death. There is a later, apparently pointless, legend in the *Purāṇas* that Purūravas was killed by ṛṣis at a sacrifice while greedily despoiling their golden altar. But now take *asta* in its other meaning as death and matters become quite clear: Purūravas is himself to be sacrificed after having begotten a son upon the water-goddess. Both his pleading and her 'wolf-heartedness' are absolutely proper; that is the reason why their son can never know his father, who is destined to keep the gods company in heaven.[42]

This is less fanciful than might appear at first sight. Purūravas in x.95.15 is assured that he is not to die, in almost the same language as the sacrificial horse in i.162.21. Both are going to the gods, and the horse is being freed from all his earthly travails. For the rest i.162–3 give a simple rite of killing, cooking, eating the sacrificed and very carefully dismembered horse—with a caressing, almost apologetic attitude towards the principal victim (accompanied by a scapegoat). The *Yajurvedic* Aśvamedha lets the horse go free for a year (cf. *RV.* iii.53.110, makes his wanderings the excuse for military aggesssion (*Śat. Brāh.* xiii.5.4), and imposes upon the chief queen the revolting duty of coupling with the slain victim (*Taitt. Sam.* vii.4; *Vaj. Sam.* xxiii; *Śat. Brāh.* xiii.5.22 etc.) to the accompaniment of an obscene discourse, like Vṛṣākapi's in x.86. The sacrifice has become a fertility rite, though now accompanied by a large number of other victims. The still later *Śāṅkhāyana śrauta sūtra* replaces the horse by a human victim (seen in the *Puruṣasūkta*, *RV.* x.90), with the same freedom for a year and the same duty imposed upon the chief queen. This shows clearly that the successive substitutions are for the original annual sacrifice of the queen's consort; the development is apparently in the wrong order, as explained, simply because of progressive assimilation of pre-Aryan customs with advancing settlement. Even the totemic rite seen in i.162–3 might have itself been derived from a far older Aryan sacrifice of the king.[43] If the *Śat. Brah.* xiii.6.2.20 really implies that the king had an option of betaking himself to the woods as an ascetic after the sacrifice, it can only have been because (at one stage) he was no longer king—even if allowed to survive the sacrifice. On the other hand the flogging of the king at the Rājasūya is ritual initiation ordeal, perhaps comparable to the Regifugium at Rome. The tremendous difference between a kings' sacrifice and the beautiful theme of Urvaśī's pining lover measures the distance between barbarism and civilization, ritual and literature. Only fresh archaeological discovery can answer such questions. The urgent problem of the present is not speculation about the distant past but change of the means of production: without which we cannot free from bondage—old or new, religious or capitalistic, that great majority of our people whose labour has been utilized only for the profit of others.

NOTES

1. Hereafter, citations from the *Ṛgveda* (for which I have also made use of the Macdonell—Keith, *Vedic Index* and Grassmann's *Woerterbuch*) will be given without a preceding abbreviation; the other commonly cited source is P. Chentsal Rao's collection of *gotra* lists and rules: *Gotra-pravara-nibandha-kadambam*, Mysore, 1900. This is abbreviated as *GPN*, with reference by page and line numbers. Keith's devastating criticisms in his book *Religion and Philosophy in the Veda* (Harvard Or. Series 31, 32) have been helpful in that they afford a good excuse for not making further detailed reference to the earlier writers, and restricting myself primarily to the sources. Other frequent citations: Vd = the Vendidād, Yt = the Yaśt, both in J. Darmsteter's translation, *Sacred Books of the East*, vols 4, 23; Her. = Herodotos; Marshall (Sir J. ed.), *Mohenjo-daro and the Indus Civilization*, London, 1931; Mackay (E. J. H., ed.), *Further Excavations at Mohenjo-daro*, New Delhi, 1938; Vats (M.S.) *Excavations at Harappa*, New Delhi 1940; Frankfort (Henri) *Cylinder Seals*, London 1939; Herzfeld (Ernst) *Zoroaster and His World*, Princeton 1947. The Poona critical edition of the *Mahābhārata* is cited as *Mbh.*, the Vulgate denoting the Calcutta editions.
2. F.E. Pargiter: *The Purāṇa Text of the Dynasties of the Kali Age* (Oxford, 1913). The Kāṇvāyanas are the only proper Brahmin (p. 35) kings while we have the statement (p. 25) that after Mahāpadma Nanda, all succeeding kings would be Śūdras or Śūdra-like. This would mean primarily that they did not claim Vedic ancestry nor observe the pure Vedic ritual, and there is no reason to doubt this, for the Mauryas certainly did not.
3. Ikṣvāku is mentioned by name in x.60.4; hymns x.57–60 are supposed to be by the Gaupāyanas, dismissed priests of Ikṣvāku. With him and the Cedians we come to the end of the Vedic tradition and the beginning of the *Purāṇa-Mahābhārata* complex.
4. H. Oldenberg gave an excellent discussion of the authorship problem for the *Ṛgveda* in *ZDMG*, xlii.1888, 199–247. But preconceptions as to the original position of the Brahmins seem to have prevented conclusions being drawn about the fusion of two originally inimical peoples and their traditions, or alternatively the development of irreconcilably antagonistic caste-classes.
5. It may be noted that whereas all Gotamas and Bharadvājas are Aṅgirasas, the converse does not hold and authorship attributions in books viii and ix seem to prove the existence of Aṅgirasas who were neither.

6. Indra had been deified by some Aryan tribes as early as 1400 BC if we may trust the famous identifications of Hugo Winckler, who found Aryan gods on Boghazkoi tablets; E. Forrer, ZDMG. lxxvi, 1922, 174–269. The actual gods, as reported by Forrer (p. 250) are: 13. (the gods) mi-id-ra-aś-śi-il 14. (the gods) u-ru-va-na-aś-śi-el (*var*, a-ru-na-aś-śi-il), 15. (the god) in-tar (*var*, in-da-ra), 16. (the gods) na-śa-ad-ti-an-na,. The equivalents would seem to be Mitra, Varuṇa, Indra (cf. Grassmann col. 213–14), and the Nāsatyas, but the question remains unanswered as to why the first two are mentioned in the plural (with the unique termination śil) when the honorific plural is never known for any god in Hittite records. The Aryan element in those records is not to be doubted, and so Forrer's statement that an Aryan tribe Manda (= the later Medes) seems to have existed near lake Urumiah has to be accepted. The terms *traivartana, pañcavartana* etc. recognizable in their cuneiform equivalents, and the method of breaking in horses which they seem to set forth, are particularly interesting. See also P.E. Dumont in *JAOS*. 67, 1947, pp. 251–3, for Indo-Aryan names in Mitanni, Nuzi, and Syrian documents.
7. In the case of Agni, there is no ambiguity. Fire was always used for clearing land by burning it over, as in x.28.8, *Śat. Brah.* ii.1.2.21, and even for destruction of hostile cities and fortifications. The *Mahābhārata* (1.214–210) story of burning down the Khāṇḍava forest shows the combination of a sacrifice to Agni, land-clearing, and military operation.
8. Sāyaṇa again calls Tvaṣṭṛ an Asura when commenting upon iii.48.4 but Prajāpati on iv.42.3, Viśvakarma on i.32.2; i.61.6; i.85.9. One god entering into the pantheon under different names would make it easy to develop the later monotheistic syncretism. *RV.* ix.5.9: *tvaṣṭāram agrajāṃ gopām puroyāvānam ā huve; indur indro vṛṣa hariḥ pavamānaḥ prajāpatiḥ* shows an early beginning of such identification which is also to be seen in x.125, and iv.20, for other gods.
9. The *Pañcaviṃśa Brāhmaṇa* (xxi.12.2) may refer to some other Vasiṣṭha in calling the seer the son of Vīḍu, though the same accounts calls Viśvāmitra king of the Jahnus, which would seem to refer to the two founder ṛṣis. But the conflicting double account of Vasiṣṭha's birth in *RV.* vii.33.11–13 wherein he is born of a water-goddess as well as from a jug which received the semen of Mitra-Varuṇa, will appear to be of special interest in the sequel.
10. Of course, we have other descendants of the gods. Bhṛgu is sometimes a descendant of Varuṇa; x.15–19 are by sons or descendants of Yama, x.135 by a Kumāra Yāmāyana; x.154 by Yamī. Among sons of Indra are counted Vimada, author of x.20–6, the ape Vṛṣākapi of x.86, and Jaya, author of x.180. All *gotra* names ending in—*stamba* are Bharadvājas.
11. Apsu is good Sumerian for the sweet (potable) waters both above and below the earth and the *apsaras* (in spite of Grassmann's derivation *a* + *psaras*) is a water deity. One may note other Sumerian elements in plenty. The god Anu might even have been worshipped by the Anu tribe of the *dāśarājña* enemies of Sudās. Certainly, Enki has features that remind us of Yama; his being a god of the *apsu*, and sleeping (after creation), are reminiscent of the later Indian Nārāyaṇa. The reason for not giving way to this sort of speculation about the Sumerians is the lack of clear documentary connection between the two cultures, and the great

difference in dates, though nothing prevents the legends and cults being common property of pre-Aryan peoples some of whom later became Brahmins. The other difficulty is our ignorance of the actual phonetic values which were assigned to Sumerian ideograms at various times and places; a personage whom textbooks of a generation ago called the '*patesi* of Shirpurla' is now known as the '*isag* of Lagash.' So, those who wish to follow in the footsteps of L.A. Waddell should find plenty of latitude of their conjectures. Let me present conjecture-mongers with the undeniable fact that the spotted cow Pṛśni containing the sun, moon, and stars (viii.94.2) fits the Egyptian picture of the world-cow while *Ṛgveda* ii.13.8 mentions a Nārmara whom someone is sure to equate to the Pharaoh Narmer-Menes. Then take the Yakṣus (vii.18.19) as the Uyksos, and so on.

12. Sāyaṇa's gloss as well as the *Bṛhaddevatā* comment seem to take *māna* in vii.33.13 as referring to Agastya's birth from a jar, begotten from the joint semen of Mitra-Varuṇa. Here, it may be pointed out that Vasiṣṭha stands in a special relationship to Varuṇa not only in his descent but in the intensity of his feeling of guilt, demonstrated in the four hymns vii.86–9. In vii.84.4, the seer asks what his sin was that the god wishes to strike him down; in 5, he wishes for release from some ancestral transgression or betrayal: *ava drugdhāni pitryā sṛja*; the next *ṛk* pleads action against the singer's will and the seventh promises service of the humblest sort: *aram dāsa na mil̤huse kāraṇi*. In vii.87 the tone of self-abnegation is not so prominent, but the final verse again yearns for blamelessness before Varuṇa. The briefest of the lot, vii.89 seems charged with this sense of guilt acquired by unspecified but necessary action: *kratvaḥ samaha dīnatā pratīpaṃjagamā śuce; mṛl̤ā sukṣatra mṛl̤aya*. Nothing of this is shown by any other seer of the *Ṛgveda*, though they all honour Varuṇa as the first-born, just, benign, and peaceful god. We might venture upon the interpretation that Vasiṣṭha was really guilty of having abandoned the ancestral cult in favour of more paying practices, such as the *yajña* and worship of the war-god Indra; it is for this that his descendants had to ask forgiveness. In this case, vii.88.4 would even acquire a special significance in its statement that Varuṇa had made a *ṛṣi* of Vasiṣṭha. When and where this supposed transformation occurred is not clear, but it must have been early to give the Vasiṣṭhas their traditional priority in *yajña* ritual (*Bṛhaddevatā* v.156–9; *Śat. Brāh*. xii.6.1.41, ii.4.4.2. etc.). Aryan wanderings extended far beyond the upper Indus landmass and this has left its mark upon the *Ṛgvedic* tradition also. Vasiṣṭha speaks of being taken up on the ship of Varuṇa, and Kakṣīvān sings (i.116) of Bhujyu being saved at sea by the Nāsatyas. A ship with a hundred oars (i.116.5) and journeys three days away from the shore would hardly be expected on the upper Indus or any lake in the Punjab. Quite incidentally, the father of Bhujyu is Tugra (i.116.3, 117.4), which is also the name of an enemy of Indra (vi.20.8; vi.26.4; x.49.4).
13. Śunaḥśepa, son of Ajīgarta, is the traditional author of i.24–30; the *RV*. knows a Bharata Devavāta in iii.23.2–3. The intended victim must have been a Jamadagni (cf. p. 23).
14. For this stanza and a careful discussion of *gotra-pravara* exogamy as well as correspondence between the traditional lists and the classification implicit in

Pāṇini's derivations, see John Brough, 'The Early History of the *Gotras*' in JRAS 1946, pp. 32–45; 1947, pp. 76–90. Though the learned author's approach and point of view are entirely different from those adopted in this note, it is remarkable that he reaches the conclusion that at the time of composition of the *Śatapatha Brāhmaṇa*, the entry of the Jāmadagnyas into the Brahmanical fold was (probably) still comparatively recent. My thanks are due to Prof. Brough for suggesting some corrections, though we still differ on the main question.

15. The burning by the Saudāsas of a son of Vasiṣṭha named Śakti, is also reported by the *Śāṭyāyana* and *Jaiminīya Brāhmaṇas* (H. Oertel, *JAOS*. xviii, 1897, pp. 15–48, particularly p. 47). For the cannibal Saudāsa in later fable, *Jātakamāla* 31 etc.
16. We seem to have a reference to both divine and human imprisonment (of Brahmins) in iv.12.5 *ūrvād devānām uta martyānām*. The *yādvaḥ paśuḥ* (viii.1.31) could be a Yadu prisoner of war, particularly when read with viii.6.48: *śravasā vādvaṃ janam*. The traditional Yadu capital Dvārakā cannot have been the modern port of that name in Saurastra. We have a clear narrative of the Yadus including Kṛṣṇa and Balarāma, being driven out of Mathurā by Jarāsaṃdha. They go *westwards* to found the new city in the safety of a mountain barrier: *Mbh.* 2, 12, 9; 2, 13, 44, 49, 65. This is the logical direction, considering the desert to the southwest of Mathurā; the original Dvārakā may thus have been Darwaz in Afghanistan, or the capital of Kamboja in Buddhist records.
17. Śarabha is called *ṛṣibandhu* in viii.100.6 but without the forceful contempt that goes with the termination *bandhu* later on. The Licchavis are Kṣatriya Vrātyas according to *Manusmṛti* 10.21 var. *nicchivi*), known to Buddhist literature generally as Vajjis (= wanderers) Patañjali on Pāṇ. 5.2.21: *nānājātīyā aniyatavṛttaya utsedhajīvinaḥ saṃghā vrātyāḥ* shows that any tribal organization outside the Brahmin ritual and four-caste system could be called Vrātya, foreshadowing modern guild-castes and professional tribes. The *Mahāpariṇibbāṇasutta* shows that the basic rules of the Buddhist *saṃgha* were derived from Aryan tribal constitutions, specifically that of the Licchavis. For a survey of the Brahmin literature (without realization that *sūtras* concerned only with reconciling Vrātya observances with Vedic ritual say nothing about the actual life led by the tribes) see J.W. Hauer, *Der Vrātya* (Stuttgart 1927; vol. I only). The Vrātya Gṛhapati of *Pañc. Brāh.* xvii.1.14, 17 could easily be the tribal chief with the usual priestly functions, and no other explanation will fit as well.
18. Some of these names may be adjectives, but this seems a reasonable way to make up the *dāśarājña*; just which people are qualified as *śivāsas* is not clear, so possibly the Śivas are one more tribe. The second battle is assumed to be distinct from the first.
19. Identification is particularly difficult in the case of the Pūrus, for the name can be an adjective for plenitude, or a tribe of people in general, as well as a specific tribe named Pūru. In vi.46.8, the particular tribe is meant, being mentioned along with Tṛkṣi and the Druhyus; similarly in i.108.8. But their position even as against the Vasiṣṭha and Sudās is not clear, for vii.18.13 speaks either of having beaten or of hoping to defeat (*jesma*) the tricky-voiced Pūru'; in vii.19.3, Indra

is spoken of as having helped the Pūru king Trasadasyu; in vii.96.2 the phrase *adhikṣiyanti pūravaḥ* has been stood by some as indicating that the Pūrus were then settled on both banks of the Sarasvatī. The adjective *mṛdhravāc* is also used of the Paṇis in vii.6.3, the Dasyus in xv.29.10. Sudās might even be made out a Pūru by i.63.7. Hopkins in *JAOS*. xv, pp. 252–83 outdoes the most ridiculous of Indian pandits in deducting that the *dāśarājña* was a conspiracy led or instigated by Viśvāmitra (pp. 261–5). The basis seems to be his main discovery, namely that vii.18 contains derisive allusions to Viśvāmitra as often as possible. Just how this escaped the Indian tradition, which is generally so hostile to Viśvāmitra, has yet to be explained; but undoubtedly some lineal descendant will appear to rectify the omission made by Hopkins!

20. Apart from stylistic and metrical variation, as well as the subject matter, the mere incidence of hymn dedications may be used as a guide to clan differences. The ninth book, being dedicated to Soma, and the Vālakhilyas as later appendages, have been discarded; in doubtful cases, I follow Grassmann as far as possible. The standard hymn order within books or groups allows us to emphasize dedications to Agni, Indra, and all the rest. Among the 'rest' have been counted even those hymns where Indra or Agni, or both have a share. This gives us the following table:

Book	Agni	Indra	Rest	Total
ii	10	12	21	43
iii	29	24	9	62
iv	15	17	26	58
v	28	12	47	87
vi	16	31	28	75
vii	17	15	72	104
viii	14	45	33	92
ix	45	41	105	191
x	30	44	117	191
Totals	204	241	458	903

Modern statistical tests give information that agrees very well with what we know from other considerations. The Viśvāmitra book (iii) differs from all the rest, as would be expected from the real Aryan Kṣatriya tradition. Books i and x may be grouped together. Books ii.iv.vi can also be combined among themselves which proves the Bhṛgu-Aṅgiras unity of dedication. The Kaṇvas are closest to this group in spite of their great predilection for Indra, while only Atri comes near Vasiṣṭha, though none too close. (Calculations by Mr S. Raghavachari for the chi-square test). In support, we may recall that the eighth book, though Kaṇva by tradition and with a good unity of metre and style, is unquestionably of mixed authorship; not only other Aṅgirasas but Atris, Bhṛgus (including Jamadagni and Uśanas), Kaśyapa, possibly a Vasiṣṭha Dyumnīka (viii.87), Trita Āptya (viii, 47, but this is impossible as the final verses show), and even Manu Vaivasvata are given a share in the authorship, by the *Anukramaṇī* tradition. Only Viśvāmitra is stubbornly excluded, and this is highly suggestive.

21. Traditionally the Soma book contains eight hymns ascribed to a Kavi Bhārgava, who is identical with or the father of Kāvya Uśanas, who is in turn the author of three more. But the famous Devayānī story of the *Mahābhārata* shows this personage as preceptor to the Asuras, which can be explained only on our present hypothesis of assimilation of non-Aryan priests, not necessarily in India. In the *Ṛgveda*, Uśanas is mentioned almost exclusively by the Aṅgirasas: i.51.10–11 (Savya); i.83.5 (Gotama Rahūgaṇa); i.121.12 (Kakṣīvān); iv.26.1 (Vāmadeva); vi.20.11 (Bharadvāja); iii.23.17 (Viśvamanas, son of Vyaśva); ix.87.3 (Uśanas himself!); ix.97.3 (Vṛṣagaṇa, supposedly a Vasiṣṭha); x.40.7 (Ghoṣā, daughter of Kakṣīvān). Otherwise *uśana* is desire, of which Grassmann takes the name as a masculine personification. One cannot expect this in Aṅgiras books, where Bṛhaspati is an Aṅgiras (vi.73.1) and even Agni (viii.84.4) in a hymn ascribed to Uśanas. Without discussing his dentity with Kai Kaos or Kavi Usa of the Iranians, it is fairly clear that he must be a figure of the transitional period.
22. A similar reproach by Medhātithi against Vatsa Kāṇva was disproved by the accused (*Pañc. Brāh.* xiv.6.6).
23. The particular word for dam might have been *radhas* or *rodhana*, i.38.11; ii.13.10; iv.22.4; x.48.2. In ii.15.8, *riṇag rodhaṃsi kṛtrimāṇi* shows that the obstacle removed by Indra was artificial, not natural; the other references can at worst be taken to mean walls or river-banks.
24. Divodāsa is a gift of the river Sarasvatī to Vadhryaśva, according to vi.61.i. As Sudās is both Paijavana (though no Pijavana is known) and a descendant or son of Divodāsa, there is some possibility of adoption here.
25. It might be as well to point out here that the Harappa grey stone image fragment which Marshall takes as an ithyphallic dancing Śiva actually represents a young girl dancing. Bronze dancing-girl statuettes have been found in Indus excavations. A comparison of Pls LXXX and LXXXI in Vats or the corresponding plates in Marshall will show that the Harappa sculptors could delineate the difference between male and female in every line, not merely in the sexual organs. Also, the seven holes in the neck do not suggest a three-headed image but rather some elaborate head-dress or coiffure pegged into place, the head itself being turned to the figure's right. The two holes below the waistline correspond precisely to the two bosses of the girdle in such terracotta figurines as Vats. LXXVII.51, 53; the belted skirt or apron must have been of some different material held in place by pins into the holes.
26. Rather reluctantly, *Ann. Bibliography Ind. Arch.* (Leiden 1934), p. 11; C.J. Gadd, *Proc. Brit. Acad.* xlviii, 1932, pp. 191–210; H. Frankfort, *Cylinder Seals* (London, 1939), pp. 304–7. My special thanks are due to Mr R.D. Barnett of the British Museum for references, particularly to BM 89115. For the seven antediluvian sages, C.L. Woolley, JRAS, 1926, pp. 689–713; Zimmern, *Zeit. für Assyriologie* (N.F.) 35. 1924. pp. 151 ff. Both Gilgamesh and Enkidu appear on Indus seals.
27. *RV.* x.72.3, 4 speaks of an original mother-goddess from whom creation came into being; *uttānapadas* means 'with feet in the air' (for parturition) while Sāyaṇa takes this to mean 'tree' which would seem to connect the *ṛk* with the

particular seal whereof the interpretation seems doubtful to me, the 'vegetation' resembling a crab.

28. *Pañc. Brāh.* xxv.7.2 says that Gaurivīti, descendant of Śakti, performed the 36-year *sattra* to reach great benefits on the banks of the Yavyāvatī (presumably the old Ravi). This is the only other place where I have been able to find either of the two place-names above. As Daivavāta is a Bharata, Gaurivīti a Vasiṣṭha, the whole account is unusually consistent and has a historical appearance.
29. I follow: for Avestan sources, James Darmsteter's translation in *Sacred Books of the East*, vols 4 and 23 (Oxford, 1895). For the general background, Maneckjee Nusservanji Dhalla's *History of Zoroastrianism* (New York, 1938) seemed to be competent; for most of the contested points, Herzfeld's discussion in his *Zoroaster and His World* (2 vols. Princeton, 1947) seems quite reliable, with a few possible exceptions such as the identification of *soma* with the vine., p. 551. Herodotos is cited from the familiar translation by Rawlinson, with the abbreviation Her. Other abbreviations: *Vd.* = Vendidād, Yt. = Yaśt.
30. To the extent of imposing exposure of the dead in spite of original burial (Her. i.140, Herzfeld, p. 747) or cremation (Herzfeld, p. 748). Dhalla takes the Magi as west-Persian priests, Athravans as eastern.
31. I treat *tūrvayāṇa* as an adjective, without yielding to the temptation to take that and the allied *turaṇyu* as 'Turanian'. It is an adjective of Agni in i.174.3, of Cyavana in x.61.2. It seems to be a name by itself in vi.18.13; that *ṛk* repeats the substance of i.53.11 above without the name of Suśravas. Sāyaṇa turns the meaning completely around and makes Indra here the protector of Kutsa, Ayu, Atithigva. One may compare x. 49.3–5, 8 where the same characters (and a Savya) appear while 3.8 speaks of Indra helping Atithigva against Karañja and Parṇaya. Velankar, in the *Ann. Bhandarkar O.R. Inst.* xxiii.1942.657–68 (on Divodāsa and other Atithigvas) identifies Kutsa with Āyu and Atithigva for the hymn under discussion, while making out a good case for more than one Atithigva and several Kutsas (which latter is clear, the name being representative of a tribe).
32. Against my interpretation of Trita, see A.A. Macdonnell, JRAS, xxv. 1893, pp. 419–96, identifying Trita with Agni; in the same vein, M. Fowler *JAOS*. vol. 67, 1947, pp. 59–60. But there can be no possible doubt that Trita is a double of Indra at least in the one performance that interests us most, namely the killing of Triśiras.
33. A. M. Hocart: *Kingship* (London 1927); Lord Raglan: *The Hero* (London 1936). I am sorry to say that Hocart's evidence comes from a much later (for India) period, and has been reported in a fashion that needs correction. Raglan's analysis also seems incomplete, for I can show from personal experience how real historical characters have had myths attached to their names without any corresponding ritual or drama to account for the transference of older stories. Attention has to be paid to the class of people among whom the myth is current, and also to the pre-existence of a written tradition, or of other classes, which may provide the raw material for folklore. Yet these two works contain much that is suggestive and valuable, in contrast to the works of diffusionists like W.J. Perry.
34. George Thomson: *Aeschylus and Athens* (London, 1944); *Studies in Ancient*

Greek Society: The Prehistoric Aegean, (London, 1949). But the direct analogue is not possible with the material we are now discussing. Indrāṇī, the wife of Indra, is a very late addition to the *Ṛgveda*, and the great female deities like Durgā-Pārvatī, Lakṣmī, etc. are much later. Umā in the *Ṛgveda* does not appear to have any connection with the later goddess whose physical merging into the hermaphrodite Śiva indicates just what was shown for Greece, seeing the position she still occupies as Durgā, an eastern mother-goddess. The female deities of the *Ṛgveda* appear negligible, or local, like the dawn goddess *Uṣā*, the goddess of birth Sinīvālī, or the river goddess led by Sarasvatī. I suggest that at the early stage, the invaders had an overwhelming victory. Only later did they find it necessary to admit these older elements, along with the people who preserved that culture or its remnants. Otherwise, we should have a course of development the very reverse of that generally found, from the patriarchal back to matriarchy. Then, why the least Aryanized of India's primitive tribes have the matriarchal system would be difficult to explain. My suggestion would also account for the fact that many very old legends, such as those connected with the flood, appear only at the post-Vedic stage. What synthesis lies back of the multiple-headed Indus valley images cannot be analyzed from available sources, but undoubtedly, they had composite deities also. My own explanation follows in the next section.

35. This is treated to some extent (for modern Dravidian India) by O.R. Ehrenfels: *Mother-Right In India* (Oxford, 1941). The author's citations of our oldest sources are perfunctory, second-hand, and irrelevant or inaccurate because of consequent misinterpretation. The comparison on pp. 180–1 between what Marshall imagined to be the essential features of the Indus-Valley culture and what Ehrenfels believes to have been Nayar civilization at is height is particularly superficial and misleading, the supposed features not being exclusive.

36. Saramā's tracking down cattle *stolen* by the Paṇis is unquestionably a later story, to explain a legendary strife. No *Ṛgvedic* hymn which refers to Saramā says anything about the cattle having been stolen. The goddess presents a blunt, aggressive demand from Indra to the Paṇis, apparently for their own cows, in x.108. The other references generally show that 'cows' can be understood as rivers; best of all in vi.16.8.

37. For Mā as a mother-goddess, cf. *Amarakośa* 1.1.29; what connection exists with the Hittite goddess of the same name is not known.

38. In this phrase, the dual *mātarā* is taken to mean night and Uṣas in i.142.7 and v.5.6; the sky and earth in the remaining cases, but without internal evidence in ix.102.7. This classical interpretation shows its own inconsistency, strengthened by ix.33.5 which has the plural, along with the adjective *brahmī*, which is unique in the *RV.* and may therefore indicate connection with special Brahmin cults. Further, Sāyaṇa gives *udakasya* as an alternative meaning for *ṛtasya* even on v.5.6; vi.17.7; x.59.8, which makes it likely that the origin of the phrase under consideration is actually in the cult of the river-mothers, perhaps of two rivers. By itself, *yahvī* is used in the sense of river, quite unambiguously in ii.35.9; iii.1.4, 6, 9; i.72.8.—and even of the seven rivers.

39. Qingu, taken as consort by Tiamat after the killing of Apsu, seems also to be Tiamat's son (Langdon's translation of the *Enuma Eliś*, ii.34, ii.41). Similarly Tammuz and Ishtar.
40. An even better example is the Māndhātṛ, legend. The king is perhaps mentioned in i.112.13, viii.40.2; the word elsewhere in the *Ṛgveda* means 'pious'. In the *Mahābhārata* (3.126) we have his father Yuvanāśva drink enchanted water in Bhṛgu's *āśrama* (an inversion of bathing in the enchanted pool), and so become pregnant, the son being ultimately born through his side and (in the vulgate Droṇaparvan 62) suckled on Indra's finger. This is a complete repudiation of maternity, as with the couvade. *Mbh.* 3.127 has rationalization, by reversal, of the many mothers. Jantu is born jointly of king Somaka's hundred wives, then sacrificed in a *yajña*, by which each of the hundred mothers conceives a complete son. (cf. *Kathāsaritsāgara* 13.57–65). The Southern recension substitutes *jyeṣṭhāyāṃ samajāyata* for *strīśate samajāyata*, rationalizing still further.
41. Actually the Cyavana story is not a parallel at all, for the rejuvenation is performed by the Aśvins and the immersion method is later (*Mbh.* 3.123.15–17) than the *Ṛgvedic*, where the sage regains his youth by having his skin drawn off like a garment (v.74.5; i.116, 10). This is the older version, based upon primitive wonder at a snake's casting off his skin to appear rejuvenated.
42. Compare here the outspoken and even obscene invitation of Iśtar to Gilgameś (R. Campbell Thompson: *Epic of Gilgamish*, London, 1928, pp. 33–4 = vi.45–79) to become her lover. He rejects her advances scornfully, pointing out that all her previous lovers came to a sticky end. 'The deified Gilgameś' is two-thirds god, one third man, son of a queen of Erech by a *lilla*; whatever the father might have been (cf. S. Langdon, *The Babylonian Epic of Creation*, Oxford 1923, pp. 215 ff.), the mother must have been a goddess. The athletic hero nevertheless fails in his quest for immortality, and so is doomed to die, like Herakles, Purūravas, his own predecessor in the king-list Tammuz; and like Bhīṣma who rejected Ambā. Even in the *Ṛgveda*, Urvaśī is a goddess of the rivers: v.41.19 = *abhi na iḷā yūthasya mātā sman nadībhir urvaśī vā gṛṇātu; urvaśī vā bṛhad-diva gṛṇānā abhyūrṇvānā prabhṛthasya āyoḥ*. The exact translation is in doubt, but at least Urvaśī is on the same footing as Iḷā 'mother of the herds', and the adjective or name *bṛhad-divā* might equate her to Uṣas.
43. As in the Persian festival of the Sakaia, Dio Chrysostom iv.66–8; here the prisoner substituted for the king actually enjoyed all royal prerogatives for a fixed period before being scourged and sacrificed.

8

Development of the *Gotra* System*

1. Unlike Vedic kinship terminology, the word *gotra* cowpen, herd of cattle, is not even Iranian, let alone Greek or Latin. Yet the institution existed in the earliest Roman gentes (with their unmistakably totemic names like Porcia, Fabia, Ovidia, Asinia, etc.) and in pre–Kleisthenes Athens. Exogamous clan–groups are known to arise at a primitive stage in almost every type of society, including the Australian aborigines, African and American tribesmen, the highly civilized Chinese. We have therefore to compare not mere words but forms of the institution, with full reference to the social context. The reader, if he wishes to see the background, must pay some attention to books like R. Briffault's *The Mothers;* or if he prefers disjointed accumulation of facts, E. Westermarck's *History of Human Marriage.* The basic developments will be found given with incomparable clarity by F. Engels, in his classic *Origin of the Family, Private Property, and the State.*

Historical (dialectic) materialism enables us to demonstrate the course of development of the system, for the essential relation, that between *gotra* and forms of property as well as property–rights, remains clear at each stage. In the formative period, the tribe owns essential means of production; later the exogamous clan, then the large patriarchal family, and finally the individual owner. Wealth is first measured in terms of cattle (Latin *pecunia,* Sanskrit *godhanam*). This continues even after slow change from pastoral to agrarian economy for the number of cattle still indicate approximately the extent and yield of the land–holding. The form of property provides subsistence and chief reason for continuity, hence the name *gotra* for the group unit which is marked as

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*H.L. Hariyappa and M.M. Patkar, eds, *Professor P.K. Gode Commemoration Volume* (Pune, 1960), pp. 215–24.

its owner. It might be objected that the whole tribe is not indicated by the name *gotra*. The answer to this is that in the first place, the whole of human society, to a primitive tribesman, begins and ends with the tribe; secondly, when tribes learn to live together, we can show examples of tribes being enrolled as *gotras*.

There are valuable indications in the *gaṇapāṭha* for our thesis. Śālaṅkāyana is a tribal name as well as a Viśvāmitra *gotra*. The Udumbara–Audumbara tribe struck coins still found in profusion; the name is totemic, the tree being actually shown on the coins; again we have the *gotra* in all Viśvāmitra lists. It seems to me that this process goes back even to the Vedic period, for Bhṛgu, Vikarṇa and the like. The *Kāśikā* on Pāṇini 4.1.104 furnishes a gotra name Niṣāda, which otherwise denotes non–Aryan aboriginal tribesman.

Pāṇini 4.3.127 (with the *Kāśikā*) shows that each *saṃgha* (tribe) and *gotra* had once its cattle–brand *aṅka* (to be distinguished from the *lakṣaṇa*). This would be possible if and only if at one time the cattle were the common undifferentiated property of the tribe or *gotra*. With increasing commodity production we get break–up of the *gotra* into large family groups, at which stage *gotra* becomes synonymous with the patriarchal joint family, cf. *gotra–jaratī, gotra–skhalanam*. It should be kept in mind that new basic forms of property are coming into existence at this time, cattle being of less and less importance. Thus the name *gotra* would not be passed on to smaller units. The śūdra, like the slave in ancient Greece and Rome, has no share in the tribal or household property (as distinguished from his tools and utensils), hence logically he has no *gotra*. The kṣatriyas die out rather early to be replaced by new ruling groups that live on taxes; the vaiśya soon takes to a cash economy even when he continues to breed cattle for profit; so it follows that these two castes loose the *gotra*—in Brahmin theory—rather early.

This enables us to explain the apparently conflicting rules in the *dharmaśāstras* for property division, namely that the legitimate sons take equal shares or that the eldest inherits all, (or all the cattle and land) taking his father's place, supporting his brothers and unmarried sisters. Here we have equal rights of all in the property of the great patriarchal household, which breaks up in the first case, remains undivided in the second. *Yājñavalkya* 2.135 gives the rule, as in ancient Rome, that the *gotraja* (members of the same gens) collectively inherit the property of the deceased in the absence of immediate heirs such as son, wife, daughter, brother, parent. But it must be kept in mind that we see a very late stage at the time of the *smṛtis*,, with only *formal* survivals of the older days; that the *gotra* name need not occur in the larger unit, the *pravara* (phratry), shows that the process was at one time reversible, that new tribes could be enrolled into given groups with the status of exogamous subgroups.

With property division arises a ban upon the older marriage custom. For example, *Manusmṛti* 9.190 says that issue may be raised by a *sagotra* upon the widow of a man without heir, the widow then delivering the whole property to this posthumous 'son'. In *Ms*. 9.146 this right belongs naturally to the brother of the deceased; but if he exercise it without formal 'appointment'—which could only be by sanction of the *gotra* as a whole, or the nearest elders—or in desire, or when a legitimate son already exists, it amounts to adultery (*Ms*. 9.59–62; 9.143–147). The adopted son may never assume the *gotra* or the property of his natural father (*Ms*. 9.142); this runs counter to the rules for such *dvyāmuṣyāyaṇa*, showing how the book labours to reconcile two divergent forms. It may be noted that the word for such heritable property is *riktha*, that which may be alienated as having been acquired by the individual's labour (*Ms*. 9.208–9); hence not common property—which seems to have existed simultaneously. *Ms*. 9.182–3 says that one son for several brothers, or for several co–wives of one husband, shall count as son for all. *Such rules clearly indicate former group–marriage and group property*. The passing of the old system is shown by *Ms*. 9.181 which sadly contradicts its own theory of the legitimate *kṣetraja* pseudo–son (*Ms*. 9.32–55, 173) by saying that the son belongs to him whose seed begot him, not to the owner of the field, i.e. of the wife upon whom the child was begotten. Even more clearly, Āpastamba 2.27.2–7 admits that the bride was given to the whole family (*kule kanyāpradānam*) in older days, but states that marital rights now belong to the individual husband alone, not even to any other member of the family—with whom intercourse would be adultery (*Āp*. 2.13.7.9). The older *ṛṣis* got away with it 'on account of their great lustre'! *Āp*. 2.14 shows that this is solely on account of property inheritance, equal division among all heirs being recommended with the admission that by older custom the eldest son had special rights.

Woman, according to the *smṛtis*, thus becomes herself a peculiar form of property through which a legitimate heir could be obtained for the inheritance of the remaining property, and for the offering of food to the manes. This implies that *at the earlier stage the gotra had a common cult of the dead,* providing for them beyond the grave just as it provided for the aged who were no longer able to feed themselves in this world. In the other direction, this culminates in the ban upon Brahmin widow remarriage. Where the right of the woman's clan is strongly maintained—as happened at some early stage in almost all pre–patriarchal societies—we have the development of the Āsura marriage (*Ms.* 3.31) by bride–purchase; if the woman dies without issue, her property then reverts to her parents (*Ms.* 9.197), which should indicate that some *gotras* once derived from the mother, not the father. Finally, there was the case of sons by wives of different caste, who therefore had neither *gotra* nor right of inheritance. It follows that such a son would have to work for a living, as a servant or by some craft. I suggest that this last explains the curious presentation in the *smṛtis* of professional guilds as mixed castes.

2. The rest of the note will be devoted to a review and criticism of a newly published book: *The Early Brahmanical System of Gotra and Pravara, a translation of the Gotrapravaramañjarī of Puruṣottama Paṇḍita* by John Brough, Cambridge University Press, (1953, pp. 18 + 215 + index). The substantial merits of the book make the views in the author's preface all the more misleading; it is those views that will be criticized in the main.

The first part of the title is not justified. The *gotra* system may be very old, but the published lists are certainly not. The grouping into 18 main sets (including kevala–bhārgavas and kevala-āṅgirasas) is suspiciously *purāṇic*: the great prototype of the *purāṇas*, the *Mahābhārata* (a story of a battle fought in 18 days by 18 legions) was redivided[1] into 18 sections; there are 18 major *purāṇas*. Even Rājaśekhara's *Kavirahasya* follows this pattern of division which is reflected also in the *Pṛithvī–rāja Rāso*. There is all the more reason to suspect these 18 major *gotra*–groups, seeing that the original *ṛṣis* are supposedly seven, and again that the lists derive, as Brough himself has shown, from one very much like that presented in the *Matsya–purāṇa*. Since it is known that the extant *purāṇas* have been revised[2] as late as the early Gupta period, one suspects that the 'early' system of *gotra* and *pravara* was somewhat different.

Further evidence against the sacred *purāṇic* number 18 being original for *gotras* is the dissociation of the Kaṇvas from the Kaśyapas, so closely allied in the Śakuntalā episode. The position of the Kāṇvāyanas is ambiguous. Both Kaṇvas and Kaśyapas are jointly excluded from sacrificial gifts by an injunction of Hiraṇyakeśin—Satyāṣāḍha. This last authority completely omits six of the 18 main groups, a loss which Brough presumes to be recent.

3. Like any other living institution, the *gotra* system changed. One looks in vain through Brough's work for any consciousness of this, or working out of the implications. For example, the position of the Jātūkarṇyas is uncertain in the various traditions (p. 180), which seems to the translator the fault of some text, not uncertainty of the synthesis itself. He

does note, in examining a 'relatively small' number of inscriptions, discordances 'some of which must betray fictitious Brahmins' (Preface p. xvii). It does not suffice to discard a few seemingly aberrant *gotra* names as of 'fictious' Brahmins without inquiry whether all Brahmins were not relatively fictitious at some stage or other, as in some 'black Iyengar' villages of Karnataka. The Latin *flamen*, no matter how satisfactory to the philologists, is not the equivalent of the Indian Brahmin at any time. How did the institution of a Brahmin caste develop? As for particular Brahmin groups, it is seen at once by the actual citations in the *Ṛgveda* and later attribution of *Ṛgvedic* hymns to authors that the Kaśyapas are of no importance at the early stage, if indeed they were Brahmins at first. Yet they become very prominent during the later Vedic period with Asita (Pāli, *kāla*) Devala, whom tradition places as just prior to the Buddha. How is it that their claim to the greatest antiquity is allowed by other Brahmin clans even though exclusion from sacrificial gifts, i.e. the active priesthood, survives in at least one ancient book as cited above? The explanation which I ventured to give is that *part* of the institution is formed under the influence of pre–Aryan culture. Pargiter (*Ancient Indian Historical Tradition*) basing himself too narrowly on the same *purāṇas* to which Brough traces the oldest complete *gotra* lists, concluded that Brahmins far antedate Aryans. Some such conclusion would be forced upon us by the *purāṇic* statement that Rākṣasas were among the (clearly un–Aryan) descendants of Agastya, not to speak of Pulastya, Pulaha, Kratu—three, of the original seven sages, who are supposed to have left only demon progeny. The *Aitareya Brāhmaṇa* 7.18 tells us that the 50 youngest sons of Viśvāmitra were cursed by their father, so that 'most of the Dasyus are the descendants of Viśvāmitra'; the occasion is that these sons showed their displeasure at the adoption of and seniority given to Śunaḥśepa, whose descendants thenceforth belong both to the Viśvāmitra and the Jamadagni *gotras* as the gens Devarāta. The *gotra* still exists.

In considering the historicity of clan names, one is puzzled by the disappearance of some, as for example the Śyāparṇa Brahmins (*Ait. Brāh.* 7.27) whose sacrificial rights were saved by Rāma Mārgaveya. Neither Śyāparṇa nor Mārgaveya is in the lists, while Mārgava is a low, mixed, fisherman caste in *Manusmṛti* 110.34, a tribal name absorbed into the later caste system, probably as a guild. Śyāparṇa Sāyakāyana was the last (*Śat. Brāh.* 4.2.1.39) to perform the complete five–fold sacrifice, which includes human sacrifice; is he, alone among the Śyāparṇas represented by Sāyakāyaniḥ of the Gārgyas? The Vikarṇa of Pāṇini 4.1.117 accounts for the Vaikarṇas among the Vatsas; 4.1.124 for the

Kaśyapa Vaikarṇeyas; but there is more involved here than grammar. If not, why the Vaikarṇeyas among the Vasiṣṭhas (p. 173) also? It would be extraordinary if these were unconnected with the *dual Ṛgvedic* (vii.18.11) tribe *vaikarṇayoḥ janān* struck down by king Sudās in a famous battle on the Paruṣṇī. Their companions in misery were another *tribe* Bhṛgu, whose name survives only in that of the most prominent Bhṛgu *gotra* for Brahmins. The Vālaśikhas among the Vāsiṣṭhas can only be connected to the Varaśikhas (*RV.* vi.27.4, 5) wiped out at Harappa by Indra. My argument is that *gotras* could become extinct, new ones could be enrolled from non-Aryan or non-Brahminized families and tribes; the enrolment need not even be in the same clan group, at different times or places. Therefore, a unitary, definitive *gotra* lists for all time is too much to expect.

4. Brough has criticized some views of mine in the preface;[3] as the points vitally concern the subject of early *gotras*, it is necessary to consider a few here at the risk of giving this note a controversial flavour. For the rest, let me state once again that I have never believed in an Aryan *race*, having found considerable evidence for the progressive Aryanization of people whose beliefs were penetrated by Brahmin ritual, with reciprocal influence upon Brahminism.

On p. xvi of the preface, Brough says that my views about the descendants of Tvāṣṭra are void through uncertainty, for the two names Tittiri and Kapiñjala 'may well be of late origin.' The whole point of the Tvāṣṭra story is that it occurs in the *Taittirīya Saṁhitā*, which would not repeat such a myth about the name Tittiri without a measure of belief. The *Saṁhitā*, completed about the sixth century BC, is far older than any of the documents from which Puruṣottama's *gotra* lists are reported. Similarly for totemism; I gave a few names casually—omitting even the elephant (Mātaṅga) Kaśyapas, frog (Māṇḍūkya), monkey (Kapi) *gotras*—as evidence of totemic *origin*, survivals from a far older stage; there is no implication that developed Brahmin society was totemic in the same sense as the Australians studied by Spencer and Gillen. Roman society did not favour human sacrifice, but the formula *sacer esto* for capital punishment, the *pisciculi pro animis humanis* substituted at the June 7 fish-fry for Vulcanus are only two among many vestiges that show the sacrifice to have once really existed. Says Brough, 'the essential feature of totemism which we should look for is definite identification of an individual with his totem.' It seems to me that there still remains enough in the way of observances (albeit not in *gotra* ceremonies) to show that this too had once prevailed. At the time of birth, the Hindu child is still assigned to an animal *yoni* (out of 14), though the animal is not a self-evident associate of the constellation of birth. I further suggest that the particular animal given to each Hindu god as a vehicle must also have been totemic in origin, the custom reverting as far back as the Indus valley, paralleled on Mesopotamian seals, by Hittite sculptures, and Egyptian theriomorphic gods. During the millennia of urban literate culture which have left their mark upon Hinduism, there was time and occasion enough for great development away from the crude idea of a totem; yet it could not have been lost altogether simply because there always existed (as to this day) primitive cultures with which the society remained in contact. The caste system managed to absorb them in later days, not without mutual concessions.

Perhaps the best evidence for derivation from a once stronger totemism is the world *vrata*, which now generally means 'observance,' but initially meant 'behaviour like' a particular creature. This is carefully illustrated in the *kukkura-vatika-suttanta* (*Majjhimanikāya* 57; see also *Dīgha-nikāya* 24) where we have the ascetic Acela Seniya following the dog–*vrata*. The Buddha says that this fanatic would naturally be reborn as a dog; this disturbs his Koliyan lay follower, who is himself a bull-*vrata* man, hence could expect transmigration into bull form. The idea of transmigration is natural to believers in totemism first because of the identification of the individual with his totem, from which he is born hence to which he should naturally revert after death; then because several totems coalesce into a society. The *govratins* are not a Buddhist fiction but mentioned with approbation in *Mbh.* 5.97.13–14, where a special section of the nether world is assigned to them among minor demons as in the *Dīgha–nikāya* 24 version of the story. As for the other (sometimes contested) aspect of totemism, namely that the totem animal or plant was once the main diet later become *tabu*, we have the tabu against beef-eating and *gotra* names like Paippalāda. The world *vrata* has also the meaning 'feeding exclusively upon,' proved by *madhu–vrata* for a bee.

A historical clan name like *Śātakarṇī* could hardly have come into existence without harking back to totemism. Their inscriptions give only its Prakrit form *Sātakaṇi*. However, Brough notices a 'Prakritic tendency' (p. xii) in his texts, while it is clear from Pargiter's work that the *purāṇas* have been Sanskritized from an account which was originally in some prakrit, probably in Pāli. The *sāta* is presumably the Sanskrit *sapti*; not 'seven' but 'horse' (*Ṛgveda*) with special reference to the horses of the sun. Thus the proper Sanskrit form is *Saptivāhana*, as indeed the *Kalki Purāṇa* reports it, rather than the faulty re-Sanskritization *Śāta-vāhana*. *Saptikarṇa*, 'horse-ear,' is a split-totem.

Brough points out an 'egregious error' into which scholars are not likely to fall, namely taking Gotama as the Buddha's baptismal name instead of a *gotra* name. I have fallen into it nevertheless, in excellent company,[4] which includes the whole early Buddhistic order, and apparently Buddha's own family as well. At least, his stepmother Mahāprajāpatī Gotamī says in verses ascribed to her in the *Therīgāthā: bahūnāṃ vata atthāya Māyā janayi Gotamam*, verily for the benefit of many did Māyā give birth to Gotama. This makes Gotama no more of a clan name than Māyā; Siddhārtha is a later name absent from the older Pāli canon. Moreover, as this Gotamī is his maternal aunt and stepmother, she cannot belong to the same exogamous group. Brough explains this away by saying 'Mahāprajāpatī took the name Gotamī virtually as a surname, on the occasion of her marriage into the clan.' Why she alone of all the women of her time needed a virtual surname does not appear. Buddha's wife is called Yaśodharā in the *Apadāna*, Gopā in the *Lalitavistara*, Rāhulamātā in most references, but also Bhaddā Kaccānā; that is, the only name of hers which can be connected to a *gotra* is not Gotamī but Kātyāyanī, obviously her maiden *gotra*. It is only in later sources, following the *Mahāpadānasutta* of the *Dīgha–nikāya*, that Gotama is taken as the Buddha's *gotra* name. Let it be suggested that this a later formation under Brahmin influence; reading the *sutta* in question shows that the Brahmins concerned were Kaśyapas, who claimed the (or rather created a fictitious) previous Buddha, and unquestionably held leadership among the disciples that survived the Buddha. The Jain Mahāvīra's birth story (by exchange of embryos) and supposed *gotra* is clearly also under Kaśyapa Brahmin influence, the clan being very prominent in U.P. and Bihār of the sixth century BC.

5. What is needed to round out any theoretical work on *gotra*—all Brahmin texts concentrate upon theory to the detriment of fact—is field work, supported by careful search in the inscriptions. Brough tried the later without discarding his tacit hypothesis that the *gotra* list may be restored as a closed record merely by inspection of a correct manuscript. This, I fear, is not true. The one reproach that can be levelled against his editorial work is that the manuscript evidence gathered does not suffice to deal with Brahmin *gotras* as a system. The decennial *Census* of India carefully avoided recording the *gotra* actually claimed by any Brahmin, though it showed (under the British) a remarkable predilection for emphasizing religious and communal differences among Indians. I suggest that if manuscripts be collected from all parts of the country, the *gotra* lists would show a far greater variation than Brough imagines, or Chentsal Rao printed. This variation must be taken seriously: the lists

were not meant to prevent 'Scholars' from falling into egregious error, but for the daily use of priests who performed the rites. Thus there is a case within my knowledge where the boy was assigned to the wrong *pravara* at his initiation simply because the officiating purohita's list did not contain the ancient Devarāta *gotra*; the family yielded to his superior knowledge when he insisted that the correct form is Devataras.

The Karhāḍā Brahmins of Maharastra[5] have only 24 *gotras*, the Citpāvans 14, Sārasvats 21; the Deśasthas have more than 30 in the *Ṛgvedic* branch, well over a hundred among the *Yajurvedīs*. This has been shown by listing all accessible families under the corresponding *gotra*. Only this type of investigation, without *purāṇic* theological prejudices, can show what survives of the ancient *gotra* system. The field work must be undertaken soon, for the system is falling into desuetude, the *gotra* names into oblivion. Yet the system at one time succeeded in imposing itself over totally foreign sections of the population (cf. P.V. Kane, *History of Dharmaśāstra,* II. 495); the Bhils call their septs *got.* Among the Vaiśyas[6] of the south, we have a list of a thousand *gotras* (another of 25 *pravaras*) produced from otherwise unknown *ṛṣi* ancestors; obviously under Brahmin influence, as is the list of 102 Komaṭī *gotras*. This is flatly contradictory to the solitary Vaiśya *pravara* given in all the Brahmin books, and to the alternative rule that the Brahmin purohita's *gotra* is to be taken as that of the Vaiśya family for which he officiates. Nevertheless, the Brahmin purohitas believe and defend simultaneously all three systems. Less than a third of the Mysore Vaiśya families seem to observe the *purāṇic* rules; the rest have their own *gotras*, presumably from the supplementary list, of which the greater number seem originally to have gone in the female line, for the son is often assigned to his maternal uncle's *gotra.* This illustrates the readjustments Brahminism was able to make when circumstances demanded, without surrendering its theoretical immutability.

The *purāṇas* themselves state that the 'real' kṣatriyas died out before the Mauryans. It is fairly clear that the older Brahminism died out not much later. What remained afterwards was a constantly changing class which claimed ancient sanction by preserving as far as possible the old *forms*, which became progressively hollower, particularly after Islam. The essential fact is that no system can long outlive, even in form, the productive structure of society upon which it is based. The sole public reaction to recent legislation permitting marriages within the *gotra* was apathy. After all, most of the population have no *gotra*; of those that have, the younger generation rarely know their own. In practice, the prohibition of *sagotra* marriage was usually circumvented by fictitious adoption.

Differences of religion and language were aggravated by political circumstance, but Brahminism itself performs no essential function today so that nothing is likely to lead to survival, reform, or extension of the *gotra* system. The people of India no longer make their living as their ancestors did two thousand years ago. The machine age has made a sudden, profound difference. The really interesting study now would be to weigh the *gotra* system against reality, to see how far the content developed away from its supposed archaic substance, under the pressure of history.

SUPPLEMENTARY NOTES

On § 3: Though Udumbara–Audumbara seems to occur only among the Viśvāmitra's in Brough's lists, Bhavabhūti (middle eighth century AD) claims in the preface to his plays to be a Kaśyapa Udumbara: his mother's name Jatukarṇī indicates a *gotra* that could not intermarry with any Viśvāmitra. The purohita of Dharasena IV (*Ind. Ant.* XV, p. 340, 11.40–42) was an Udumbara of the Sāmānya–Parāśara *gotra*. This shows the same line of development as for the Vikarṇa tribe and *gotras*, for Udumbara is one of many foreign tribes in *Mbh.* 2.48.12, a tribe by implication of the *gaṇapāṭha* on Pāṇ. 4.2.53, and attested during the first two centuries BC by the coins published in J. Allan's *British Museum Catalogue* (pp. 122–8). Bandhula–Aghamarṣaṇa–Viśvamitra is generally proclaimed as the *pravara* of the Gāhaḍavāla priests (*Ep. Ind.* IV, pp. 97–133) while that of Lakṣmaṇasena's (*Ins. Bengal* III, p. 87, 1.42) is Viśvāmitra–Bandhula–Kauśika; both these twelfth-century combinations are quite plausible, but not in the current lists. H.D. Sankalia gives some rather foreign sounding and otherwise unknown *gotras* from Gujarat inscriptions (*Deccan Coll. Monograph* 3, Poona 1949, pp. 124 ff).

On § 4: In the first *ucchvāsa* of his *Harṣacarita* the poet Bāṇa (1st half 7th cent. AD) gives his lineage, mentioning that his people followed the cock–*vrata*—unless perchance the *kukkuṭa* of the text is a mislection for *kukkura*. Thus Acela Seniya's cynanthropy raises interesting questions about the possible totemic origin of the werewolf and lycanthropy. The *Niddsa* passage quoted in R.G. Bhandarkar's *Vaiṣṇavism, Śaivism* etc. (1.2) puts the worshippers of an elephant, horse, cow, dog, crow in the same list as named sects and worshippers of deities with proper names (Vasudeva); this is connected with the *yonī* classification, as also with the crows substituting for ancestors at an offering to the manes.

NOTES

1. In fact, the only reliable edited (by Sukthankar) portions of the Poona BORI critical *Mahābhārata* prove that the process of revision continued till modern times, and perhaps that some of Sukthankar's successors favour still more revision.
2. See the introduction to F.E. Pargiter's *The Purāṇa Text of the Dynasties of the Kali Age* (Oxford 1913).

3. He refers to nothing later than my 'Origin of Brahmin Gotras', *JBBRAS* 25, 1950, pp. 21–80; some of the ideas briefly expressed there have been developed in greater detail, *JBBRAS* 27, 1951, 1–30; *ibid*, 180–213.
4. This group also includes at least one scholar of unchallenged command over both the *gotra* system (into which he was born) and the Pāli canon: my father, the late Prof. Dharmananda Kosambi, from whom I first learned of both. The discussion as to the Buddha's *gotra* is taken from his *Bhagavān Buddha*, Nagpur, 2 vols 1940, 1941. Malalasekara's *Dictionary of Pāli Names* gives the opinion that Gotama was the *gotra* name, but careful reading will show this to be the commentator's idea, or in the later canon; for an almost solitary example, Buddha addresses his own father, as Gotama, while the father addresses him as 'Lord', in *Mahāvagga*, i.54.4; the story is obviously written in to justify the rule that no candidate may be ordained without permission of his parents. The rule was never observed till Buddhism became common, as there would be no occasion for it. However, there is an alternative possibility, namely that all Śākyans were Gotamas, and that *gotra* here has nothing to do with exogamy. In fact, the Mallas seem to be generally addressed as Vāsiṣṭhas by the dying Buddha and his disciple Ānanda. This alternative, for reasons given above, seems inapplicable to the Śākyans; but among other less Brahminised and stronger tribes like the Mallas and the Licchavis, there is little likelihood of the exogamous sub–groups being called by Brahmin *gotra* names. Incidentally, *āṁgīrasa* in Pāli denotes 'sun', just as it does in so many *Ṛgvedic* hymns (iv.2.15, v.45.8), not the *gotra* group cf. Greek *angelos.*
5. Documentary evidence for the Yajurvedic Brahmins is given by Sete's recent book on families and *gotras*; for the Sārasvats, in S.S. Talmaki's *Sāraswat Families,* part I, Bombay 1935 (The Chitrapar Saraswat Series II); for the others, in P. Moghe's 'Maharastra Pañcāṅga' for Śaka 1875, Pub. K.B. Dhavale, Bombay 1953. In all these the actual surnames and *gotras* are given, or further references indicated.
6. This refers particularly to the Vaiśya community in Mysore. The information comes from several sources, the most important of which is a Telugu MS containing the *gotra* lists. This was acquired by Brahmasri V.S. Ramachandra Sastrigal of Bangalore (from the survivors of a Brahmin purohita who ministered to Vaiśya families), and transcribed for my use. Afterwards, Mr A.R. Vasudeva Murthy of Bangalore found some locally published lists containing much the same names. Detailed field work as to the actual families and their *gotras* is wanting, though contemplated. In this connection the reader may be referred to a Hindi work *Jaina–sampradāya–śikṣā* (Bombay, NSP 1931) by the Śvetāmbara Jain yati Sri–Sripalaji. The fifth section shows the traditional development of an exogamous system in Rajasthan, both after conversion to Jainism (in which case the convert founded a clan) and on an older clan–locality basis, within the bigger groups of Oswals, Khandelwals, etc. As the people concerned were both traders and fighters, supposedly descendants of Scythian invaders, the convenience of the system for that stage of social development may be supposed much greater than any direct influence of Brahmin scriptures or tradition.

9

Brahmin Clans*

The Brahmins in India still preserve a system of exogamous groups, called *gotra* and *pravara*, within the endogamous caste; these groups have the same names, derived supposedly from immemorial antiquity, cutting across the many regional, linguistic and other Brahmin subcastes forming smaller endogamous groups for which no sanction exists besides custom. Hence the translation of *gotra* by 'clan' is justified only by lack of a better one. The earliest works on ritual like Baudhāyana contain only a skeleton list of the pravaras, the pravara being a group of gotras forming the ultimate exogamous unit. Brough supplies a long-felt need by working meticulously over the translation of a gotra list and rules given by Puruṣottama, an author of unknown date (not later than AD 1450) who collected and arranged older literature. The translation was made very difficult by the lack of a reliable text. The uncritical work of P. Chentsal Rao (Mysore, 1900, out of print) gives several divergent lists. Brough has worked through his manuscript evidence with care, selecting readings with insight, presenting the variants, tracing quotations with admirable patience and great success. This will earn him the gratitude of every worker in the field. One of his most valuable conclusions is that the rolls as they now exist derive from one prototype, which may be regarded as the Matsya Purāṇa.

Brough's general opinions, as set forth in his preface, are supported neither by the evidence he has translated, nor by any other known to exist. Inasmuch as the substantial merits of the book proper make them all the more misleading, the bulk of this article has, unfortunately, to be devoted

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[This note is a review of: *The Early Brahmanical System of Gotra and Pravara. A translation of the Gotra-pravara-mañjarī of Puruṣottama-paṇḍita.* With an introduction by John Brough, pp. x + 215. (Cambridge: University Press, 1953.]

to criticizing the few pages of the preface, rather than to well-deserved praise of the rest.

1. The first part of the title is not justified. The gotra list cannot possibly be early, no matter how archaic the system. The oldest authority, as noted, is the Matsya Purāṇa. The purāṇas were being revised till the early Gupta period, as has been proved by Pargiter's[1] analysis of the historical 'prophetic' portion. Their great prototype, the *Mahābhārata*, has been rewritten[2] not earlier than the second century AD, no matter how much of the older versions survived. That the system is itself not much older in its present form than the purāṇas is made clear by the artificial grouping into 18 separate major groups, in spite of the insistence that the original ancestors were the seven sages. There exist at least two separate lists of these seven sages, while seven (with Agastya as eighth) cannot account even for the principal groups. Now the number 18 has a special sanctity in the purāṇa-Mbh complex. There are 18 major purāṇas; the Mbh is the story in 18 sections (regrouped from 100) of a battle fought over 18 days, by 18 divisions that annihilated each other. The influence remains paramount till the days of the poet Rājaśekhara (about AD 920) who composes his Kavirahasya in the purāṇic manner to justify the profession of making verses. That the 18 major gotra groups are not original is to be seen from the dissociation of the Kāṇvas from the Kaśyapas, though both are closely allied according to the Śakuntalā episode, while being jointly excluded from sacrificial gifts by an injunction of Hiraṇyakeśin-Satyāṣāḍha (to whom at least one of the untraced quotations on p. 198 is due). While stating (p. 27) that this last authority completely omits six of the eighteen groups, Brough presumes the loss to be recent, without material evidence of any such loss.

2. Brough's methodology is open to far more serious objections. He cites with approval Benveniste's derivation of *ari* as the designation of the other moiety, at once friendly and hostile, of a society with dual organisation. To him, 'it explains satisfactorily the ambivalence of the term, since the *ari* would come as a friend to the marriage ceremony.' To derive Aryan exogamy from this frail support in philology means ignoring other ambivalent words, such as *Eevos* in Greek and *hoslis* in Latin with the same meaning. The occurrence is so common that Karl Abel suggested a theory, popularized by Freud, that such words arise with diametrically opposite meaning when they first appear in language. The philological method needs a historical vacuum in which to shed any light, like the carbon filament of an electric light. Otherwise, we get extraordinary results, that Indo-Europeans had feet but no hands; or like those of Sommer, who

philologized the Achaeans right off the map, applying rigid phonetic rules to Forrer's Hittite-Greek equations. There, as in the present case, we have to pay attention to the presence of non-Indo-Europeans in long, close contact with the people concerned. Certainly, unlike Vedic kinship terminology, the word *gotra* ('cowpen') is not Iranian, let alone Greek or Latin; yet the institution certainly existed in the earliest Roman gentes (with many unmistakably totemic names like Porcia, Fabia, Ovidia, Asinia, etc.), and in pre-Kleisthenes Athens. Moreover, exogamous clan-groups are known at a primitive stage in almost every type of society, including the highly civilized Chinese, Australian aborigines, African and American tribesmen. Thus we have to compare not mere words but forms of the institution with full reference to the social context. It is to be hoped that, when extending the present investigations, Brough will pay some attention to books like R. Briffault's *The Mothers*; or, if he prefers disjointed accumulation of facts, E. Westermarck's *History of Human Marriage*.

3. Like any other living institution, the gotra system changed. One looks in vain through Brough's work for any consciousness of this, or working out of the implications. For example, the position of the Jātūkarṇyas is uncertain in the various traditions (p. 180), but this seems to the translator the fault of some text, not uncertainty of the synthesis. He does note, in examining a 'relatively small' number of inscriptions, discordances 'some of which must betray fictitious Brahmans' (p. xvii). It does not suffice to discard a few seemingly aberrant gotra names as of 'fictitious' Brahmins, without inquiry whether all Brahmins were not relatively fictitious at some stage or other as in some 'black Iyengar' villages of Karnataka. Certainly, the Latin *flamen*, no matter how satisfactory to the philologists, is not the equivalent of the Brahmin in India, even at the earliest Vedic age. How did the institution develop? As for particular Brahmin groups, it is seen at once, by reference to the actual citations in the Ṛgveda and by the later attributions of Ṛgveda hymns to authors, that the Kaśyapas are certainly not of any importance at the early stage, if indeed they were Brahmins at first. Yet they become very prominent at the later Vedic period, with Asita (in Pāli tradition, Kāla) Devala, whom tradition places as just before the time of the Buddha. How is it that their claim to great antiquity is allowed by other Brahmin gotras, even though the exclusion from sacrificial gifts, i.e. the active priesthood, survives in at least one book, as mentioned above? The explanation which I have ventured to give is that part of the institution is formed under the influence of pre-Aryan culture. Pargiter (*Ancient Indian Historical*

Tradition), basing himself rather narrowly on the very same purāṇas to which Brough traces the oldest complete gotra lists, concluded that the Brahmins far antedate Aryans. Some such conclusion is forced upon us by the purāṇic statement that Rākṣasas were among the (clearly un-Aryan) descendants of Agastya, not to speak of Pulastya.

In considering the historicity of clan names, one is puzzled by the disappearance of the Śyāparṇa Brahmins (*Ait. Brāh.* 7.27) whose sacrificial rights were saved by Rāma Mārgaveya. Neither Śyāparṇa nor Mārgaveya is in the lists, while Mārgava is a low, mixed, fisherman caste in the *Manusmṛti* 10.34, a tribal name absorbed into the later caste system. Śyāparṇa Sāyakāyana was the last (*Śat. Brāh.* 4.2.1.39) to perform the complete fivefold sacrifice, which includes human sacrifice; is he, alone among Śyāparṇas, represented by Sāyakāyaniḥ of the Gārgyas? The Vikarṇa of Pāṇini 4.1.117 accounts for the Vaikarṇas among Vatsas; 4.1.124 for the Kaśyapa Vaikarṇeyas. It would be extraordinary if these were unconnected with the dual *Ṛgvedic* (vii.18.11) tribe *Vaikarṇayoḥ janān* struck down in battle by king Sudās, along with another tribe Bhṛgu whose total Brahminization is undeniable. Similarly Vālaśikhas among the Vāsiṣṭhas can only be connected to the Varaśikhas (*RV.* vi.27.4–5) wiped out at Harappā by Indra. Thus gotras could become extinct, new ones enrolled from non-Aryan or non-Brahminized families and tribes; the conscription need not even be in the same clan-group. Therefore a unitary, definitive gotra list for all time is far too much to expect.

4. In the preface, Brough has criticized some views of mine:[3] as the points vitally concern the subject of early gotras, it is necessary to consider a few of them even at the risk of giving the discussion a controversial flavor. For the rest, let me state once again that I have never believed in an Aryan race, having gathered a considerable amount of evidence for the progressive 'Aryanization' of people whose beliefs were penetrated by Brahmin ritual, with reciprocal influence upon Brahminism.

On p. xvi of the preface, Brough says that my views about the descendants of Tvāṣtra are void through uncertainty, for the two names Tittiri and Kapiñjala 'may well be of late origin.' The whole point of the Tvāṣtra story is that it occurs in the Taittirīya Samhitā, which would not repeat such a myth about the name Tittiri without a measure of belief. The Saṃhitā is far older than any of the documents from which Brough reproduces his gotra lists. Similarly for totemism, where I casually gave a few of the better-known names as evidence of totemic origin, survivals from a far older stage; there is no implication that the developed Brahmin society was totemic in the same sense as the Australians studied by Spencer and

Gillen. Roman society did not favor human sacrifice, but survivals such as the formula *sacer esto* for capital punishment, the *pisciculi pro animis humanis* furnished at the June 7 fish-fry for Vulcanus, and many other references show that the sacrifice had once really existed. Says Brough, 'the essential feature of totemism which we should look for is definite identification of an individual with his totem.' It seems to me that there survives enough in the way of observances and superstititon to show that this too had once prevailed. At the time of birth, the Hindu child is still assigned to one animal yoni (out of 14), though the animal cannot obviously be associated with the constellation of birth. I further suggest that the particular animal given to each Hindu god as a vehicle must have been totemic in origin, the custom going far back to the Indus valley and paralleled in Mesopotamia, as proved by cylinder and stamp seals, not to speak of Hittite sculptures or Egyptian theriomorphic gods. During the millennia of urban, literate, but pre-Aryan culture which have left their mark upon Hinduism, there were great developments away from the crude idea of a totem, yet it was never lost simply because there always co-existed (as they still do) primitive cultures with whom the society remained in contact. The caste system managed to absorb them sooner or later, not without concessions on both sides.

Perhaps the best evidence for derivation from a once stronger totemism is the word *vrata*, which now generally means 'observance', but initially meant 'behavior like' a particular creature and is carefully illustrated in the Majjhimanikāya 57 = *kukkura-vatika-suttanta*, (and Dīghanikāya 24) where we have the ascetic Acela Seṇiya following the dog-vrata. The Buddha says that after death this fanatic will naturally be reborn as a dog; this disturbs his Koliyan lay follower, who is himself a bull-vrata man, hence could expect transmigration into bull form. The idea of transmigration is natural to believers in totemism first because of the identification of the individual with his totem; then because several totems form a society. As for the other (sometimes contested) aspect of totemism, namely that the totem animal or plant was formerly the main diet later become tabu, we have the tabu against beef-eating and names like Pippalāda. The word *vrata* also had the meaning 'feeding exclusively upon', proved by *madhu-vrata* for a bee. The *govratins* are not a Buddhist fiction but mentioned with approbation in the *Mahābhārata* 5.97.13–14, where a special section of the nether world is assigned to them, among minor demons as in Dīghanikāya 24; a stanza was especially written into the text to explain that the *go-vrata* observers were those who imitated the spiritual placidity of the bull; identification of the individual with the totem animal is not in doubt!

A historic clan-name like Sātakarṇī could hardly have come into existence without harking back to totemism. Their inscriptions give only its Prakrit form *Sātakarṇī*. However, Brough notices 'a Prakritic tendency' (p. xii) in his text and it is clear from Pargiter's work that the purāṇas have been Sanskritized from an account which was originally in some Prakrit, probably in Pāli. The *sāta* is presumably the Sanskrit *sapti*; not meaning 'seven', but (as seen from *Ṛgvedic* usage) 'horse', with special reference to the horses of the sun. Thus the proper Sanskrit form is *Saptivāhana* (as the Kalki Purāṇa reports it) rather than *Śātavāhana* which is the faulty re-Sanskritization; *Saptikarṇa*, 'horse-ear' is a split totem.

Brough points out an 'egregious error' into which scholars are not likely to fall, namely taking *Gotama* as the Buddha's baptismal name instead of a *gotra*-name. I have fallen into it nevertheless, in excellent company,[4] which includes the whole of the early Buddhistic order, and Buddha's own family as well. At least, his stepmother Mahāprajāpatī Gotamī says in the verses ascribed to her in the Therī-gāthā, *bahūnāṃ vata atthāya Māyā janayi Gotamam*: 'verily for the benefit of many did Māyā give birth to Gotama', which makes Gotama no more of a clan-name than Māyā; Siddhārtha is a later name, absent in the older Pāli canon. Moreover, as this Gotamī is his maternal aunt and stepmother, it is not the Buddha's gotra. Brough explains this away by saying 'Mahāprajāpatī took the name Gautamī virtually as a surname, on the occasion of her marriage into the clan.' Why she alone of all the women of her time needed a virtual surname does not appear. Buddha's wife (Yaśodharā in the Apadāna, Gopā in the Lalitavistara), is called Bhaddā Kaccānā (not Gotamī) in the same sources, i.e. Kātyāyanī, which can only be her maiden gotra. Moreover, no other member of the Buddha's family seems to have been addressed as Gotama. When the Buddhist monk is initiated, he becomes a 'son of the Śākyans', not a Gotamīd; the Gotamaka almsmen were a later, small group. Finally, the Buddha is called Āṅgirasa, but this means 'sun' in Pāli, just as it means 'light-god' so often in the Ṛgveda (iv.2.15; v.45.8—cf. αγγελος), not in the sense of a clan-group. Brough dismisses the ancient Sutta-Nipāta words ascribed to the Buddha: *ādiccā nāma gottena, Sākiyā nāma jātiyā*, '[I am] of the *āditya* gotra, Sākiyan family,' saying that *āditya* merely signifies descent in the solar line. Certainly, all Śākyans claimed Ikṣvāku (etymologically related to *ikṣu* 'sugarcane or gourd', which has a totemic appearance) as their ancestor; hence perhaps the later purāṇic fiction of a solar lineage, but if so, they must all have been *ādiccā nāma gottena*. Possible but improbable conclusions are then that the Pāli word *gotta* does not mean the Sanskrit *gotra* here though it does elsewhere; or inasmuch as the Śākyans were too proud to mate with non-Śākyans, the *gotta* is not an exogamous unit, hence irrelevant to the entire discussion. The first interpretation of Gotama as Buddha's gotra name is in the Mahāpadānasutta of the Dīghanikāya, obviously a late formation under Brahmin influence; one could even say, influence of Kaśyapa Brahmins, as is the Jain Mahāvīra's supposed gotra and birth story.

5. What is needed to round out any theoretical work on the gotra—all Brahmin texts specialize in theory to the detriment of fact—is fieldwork, plus search in the inscriptions. Brough tried the latter without discarding his tacit hypothesis that the gotra list exists as a closed record which may be restored merely by inspection of a correct manuscript. This, I fear, is not true; the one reproach that can be levelled against his editorial work is that the manuscript evidence gathered does not suffice to deal with Brahmin gotras as a system. The decennial Census of India carefully avoided recording any of the gotras actually claimed by the various Brahmins, though it showed (under the British) a remarkable predilection for emphasizing religious and communal differences among Indians. I suggest that if manuscripts were collected from all parts of the country, the gotra lists would show a far greater variation than Brough imagines, or Chentsal Rao has printed. This variation must be taken seriously; the lists were not meant to prevent 'scholars' from falling into egregious error, but for the daily use of priests who performed the rites. Thus, there is a case within my own knowledge where the boy was assigned to the Devataras gotra at his initiation simply because the officiating purohita's list did not contain the ancient Devarāta gotra; the priest insisted that no such gotra existed, and the family yielded to his superior knowledge!

The Karhāḍā Brahmins of Maharashtra have only 24 gotras, the Citpāvans 14, the Sārasvats 21; but actual family surveys by Sete and others have shown that among the Deśasthas, the Yajurvedī group has a far greater number, well over a hundred. Only this type of investigation without purāṇic theological prejudices can show what survives of the ancient clan-system. The fieldwork must be undertaken fairly soon, for the system is falling into desuetude, the gotra names into oblivion.

The essential fact is that no system can long outlive (even in form) the productive structure of society upon which it is based. The people of India no longer make their living as their ancestors did two thousand years ago; the machine age makes a sudden, profound difference. Differences of religion and language were aggravated by political circumstances, but nothing of the sort is likely to lead to a survival, reform, or extension of the gotra system. The sole public reaction to recent legislation permitting marriages within the gotra was total apathy. After all, most of the population have no gotra at all; of those that have, the younger generation rarely know their own gotra name; in practice the prohibition of *sagotra* marriages was usually circumvented by a fictitious adoption. Yet the system at one time succeeded in imposing itself over some foreign sections of the population: the Bhils call their septs *got*. Among the Vaiśyas[5] of the south we have list of a thousand gotras (another of 25 pravaras) produced from otherwise unknown ṛṣi ancestors, obviously under Brahmin influence as is the list of 102 Komaṭī gotras. This is flatly contrary to the solitary Vaiśya pravara given in all the Brahmin books, as also to the alternative rule that the Brahmin purohita's gotra is to be taken as that of the Vaiśya family for which he officiates. Less than a third of the Mysore Vaiśya families seem to observe this rule; the rest have their own gotras, of which the greater number seem to have gone originally in the female line, for the son is often assigned to his maternal uncle's gotra. This illustrates the readjustments Brahminism was able to make when circumstances demanded it, without giving up its theoretical immutability.

The Purāṇas themselves state that the 'real' kṣatriyas died out before the Mauryans. It is fairly clear that the older Brahminism did too. What remained afterwards was a constantly changing class that claimed ancient sanction by preserving as far as possible the old forms, which became progressively hollower, particularly after Islam. It is to this late period that Brough's text belongs. The really interesting as well as important study would be to weigh it against reality, to see how far the content of the system had developed away from its supposed archaic substance under the pressure of history.

6. The essential feature of the gotra system, ignored by Brough, is its relation to property. Here, the philological, literary, and ritual sūtra evidence all agree, while the historical development becomes clear. The etymology of gotra as 'a herd of cattle' in early Vedic times shows that the name was naturally transferred to the group of human beings associated with the herd as a unit—the common owners of the herd. Pāṇini 4.3.127 (with the Kāśikā) shows that each *saṃgha* (tribe) and gotra had once its own cattle-brand *aṅka*, which is possible if and only if at one time the cattle were the indistinguishable common property of the tribe or gotra. That tribal names agree also with gotra names, so that tribes could develop into, or give rise to, gotras is seen from the gaṇapāṭha. Śālaṅkāyana is a tribal name as well as a Viśvāmitra gotra. Coins of the Udumbara-

Audumbara tribe have been dug up in profusion; the name is totemic, the tree being actually shown on the coins; yet we have the gotra in all Viśvāmitra lists. With further differentiation in property rights, the gotra naturally develops into the large patriarchal joint family, still holding its property in common. The name would not change, for cattle are the main form of property at the earlier stage, continuing as the principal expression and natural measure (cf. Latin *pecunia*) of wealth even later, when property in land becomes admissible.

The same relations are clearly reflected in the sūtras, but with a further break-up of the family. Yājñavalkya 2.135 gives the gentiles, *gotraja*, as heirs in default of immediate relatives, as in Rome. *Manusmṛti* 9.182–3 says that one son for several brothers or for several co-wives shall count as the son of all. These rules clearly indicate former group-marriage and group-property; even better proof is the *kṣetraja* heir, begotten by a *sagotra* (gentilis) upon the widow of a man who dies without a son, for inheritance of the property (*Ms.* 9.190). The right of doing this belongs preferentially to the brother of the deceased (*Ms.* 9.146), but if he exercise it without formal appointment, or with desire, or when a ligitimate son already exists, it amounts to adultery (*Ms.* 9.59–62; 9.143–7). Āpastamba 2.27.2–7 (82.13.7) is still more explicit, admitting that the bride was given to the whole family rather than to a single husband in older times, but that this practice is now forbidden. Correspondingly, the *Manusmṛti* contradicts its own theory of the legitimate *kṣetraja* pseudo-son (*Ms.* 9.32–55, 173) by saying against all usage and common sense that the fruit belongs to the owner of the seed, not of the field (wife). This is really on account of the developed forms of property, as is seen from *Ms.* 9.104–5 which gives two alternatives: either all property is to be divided equally among the sons, or the eldest inherits all with the duty of supporting his brothers; in place of the father. Both show equal rights of all in the joint property of the patriarchal household, which divides in the first case, remains undivided in the second. The *Manusmṛti*, like most similar works, labours under the strain of reconciling the old and the new. It may be noted that the word for such heritable property is *riktha*, that which may be alienated as having been acquired by the individual's labour (*Ms.* 9.208–9), hence not common property–which seems to have existed simultaneously. In any case, cattle are no longer the principal form of wealth, so that the gotra has its traditional force greatly weakened in practice.

To follow this a little further: Woman, according to these smṛtis, is herself a peculiar form of property through which a son could be obtained for continuity of the remaining property, and for offering food to the manes. This develops with progressive specialization of individual property rights of the male, to culminate in the ban upon brahmin widow remarriage. The implication for the earlier stage is that the gotra had a common cult of the dead, providing for them beyond the grave just as it provided for the aged members of the gotra who were no longer able to feed themselves in this world. Where the rights of the woman's clan were strongly maintained—as must originally have been the case before patriarchy prevailed—we have the development of the Asura marriage (*Ms*. 3.31) by bride-purchase; if the woman so married die without issue, the property reverts to her parents (*Ms*. 9.197) which implies that some gotras once derived from the mother, not the father. Finally, there was the case of sons by wives of a different caste, who therefore had no gotra; their inheritance is limited to a gift from the father during his lifetime, from his own personal wealth, particularly if legitimate heirs existed. It follows that such a son would have to work as a servant, or to learn some craft. I suggest that this last explains the otherwise uncalled for presentation in our smṛtis of professional guilds as mixed castes.

NOTES

1. See the introduction to F.E. Pargiter's *The Purāṇa text of the Dynasties of the Kali Age* (Oxford, 1913).
2. In fact, the reliably edited (by Sukthankar) portions of the Poona *BORI* critical *Mahābhārata* prove that the process of revision continued till modern times. Sukthankar's successors seem to favour continuation of such revision, if one takes literally their published ideas (without a shred of evidence) as to how the Mbh came to be written and inflated.
3. He refers to nothing later than my 'Origin of Brahmin Gotras,' *J. Bom. Branch Roy. As. Soc*., 26 (1950), 21–80; some of the ideas briefly expressed there have been developed in greater detail, *JBBRAS*. 27 (1951), 1–30; ibid., 180–213.
4. This group also includes at least one scholar of unchallenged command over both the gotra system (into which he was born) and the Pāli canon: my father, the late Prof. Dharmananda Kosambi, from whom I first learned of both. The discussion as to the Buddha's gotra is taken from his Marāṭhī writings, particularly *Bhagavān Buddha*, 2 vols (Nagpur, 1940, 1941).
5. This refers particularly to the Vaiśya community in Mysore. The information comes from several sources, the most important of which is a Telugu ms containing the *gotra* list; this was acquired by Brahmasri V.S. Ramacandra Sastrigal (from the survivors of a Brahmin *purohita* who ministered to Vaiśya families) and transcribed for my use. Afterwards, Mr A.R. Vasudeva Murthy of Bangalore found some locally published lists in Kanarese and Telugu containing much the same names. Detailed fieldwork is still wanting, but contemplated. In this

connection, the reader may be referred to a Hindi work *Jaina-Sampradāya-śikṣā* (Bombay NSP, 1931) by the Śvetāmbara Jaina *yati* sri-sripalaji; the fifth section shows the traditional development of an exogamous system in Rajasthan, both after conversion to Jainism, in which case the founder began his own clan, and on an older clan-locality basis within the bigger groups of the Oswals, Khandelwals etc. As the people concerned were traders and fighters both, supposedly descendants of Scythian invaders, the direct influence of Brahminism here may be less than convenience of the system for that stage of social development.

10

Early Stages of the Caste System in Northern India*

1. It is not my intention to describe here the Indian caste system as it exists today, for the reader has access to all the documents[1] from which such a treatment would have to be condensed. Modern caste combines loosely several features of tribal and guild organization incorporated into theoretically rigid endogamic groups. This contemporary division into an almost innumerable set of castes does not, however, agree with the oldest theoretical division into just four: the priest *Brāhmaṇa*, the warrior-ruler *Kṣatriya*, the trader-householder *Vaiśya*, and the worker *Śūdra*. An attempt[2] has been made to identify the older *varṇa* (colour) division with classes and the modern but coexistent *jāti* scheme with tribal units. But this suffers from omission of the craftsmen's guilds, and from a static conception of caste—which is not surprising as caste in itself is an attempt at the negation of history. On the other hand, it has been denied categorically that the older four-caste system ever existed[3] at any time or place though so many Indian sources of unquestionable age and authenticity refer to it as a well-known contemporary institution.

One book on caste and race in India[4] states: 'Whatever might have been the Buddha's own views and practice, it is indubitable that his immediate followers believed in the time-honoured institutions of caste, and being most probably Kṣatriyas themselves, utilized the opportunity offered by Buddha's revolt, to establish Kṣatriya pre-eminence among the four castes. The complete discomfiture of the Kṣatriyas within the Brāhmaṇic fold had made this course inevitable. Measuring their strength with the Brahmins and failing in the contest, they naturally turned their attention to the masses.'

**Journal of the Bombay Branch of the Royal Asiatic Society*, N.S., vol. 22 (1946), pp. 33–48.

The statements in this extract, when they convey any meaning at all, are demonstrably wrong. Buddha's views are quite well-attested by the earliest texts of the Pāli canon, which the author ignores entirely. Buddha's 'revolt' was against Brāhmaṇic sacrifices, not against the caste system nor for Kṣatriya pre-eminence which was traditional and acknowledged except in the functions of a priest. As the Brāhmaṇic fold, strictly speaking, contains only Brahmins, 'the complete discomfiture of the Kṣatriyas within' it is meaningless. Buddha's immediate followers are all known by name[5] and origin so that they cannot be made over into Kṣatriyas even by invoking the theory of probabilities. For example, Koṇḍañña and the other four who were the first converts were all Brāhmaṇas, as also the two principal apostles of the new faith Sāriputta and Moggallāna; Upāli, founder of the monastic rule (*Vinaya*), was a barber; from the lowest castes were recruited Sopāka (= dog-eater) and the scavenger Sunīta, who both reached the final stage of freedom from *karma*; the early lay disciples, of both sexes, were almost all Vaiśyas. The final sentence of the quotation above is about as accurate as 'The Roman particians, measuring their strength against the Jews and failing in the attempt naturally turned their attention to the masses'. The quotation, nevertheless, has great interest as a typical Brāhmaṇic document in its disregard of sources and facts, in its sweeping but puerile conclusions, and because it is used as a text-book on the subject. Nothing better could have been expected from a study which takes Brāhmaṇic scriptures, exclusively and at their face value, without critical attention to age, origin, and context.

In attempting to trace briefly the main features of the earlier caste system down to the age of the Buddha (fifth century BC) we shall have to keep in mind the Brāhmaṇic origin of most Sanskrit texts, and the Brāhmaṇic transmission of all of them. As far as accurate historical evidence is concerned, most of these are mere verbiage; an occasional reference is all we have to piece out Indian history, the confusion being aggravated by fantastically ignorant late Brāhmaṇa commentators, as well as by the fact that it is a poor Sanskrit word that has less than a dozen meanings. Most kings of whom any record survives in the literary tradition have several names each while occasionally the same name has caused sagas of two or more distinct persons to be combined. The ludicrous errors to which the misreading of a single letter[6] can lead are often perpetuated by modern writers as sober historical truth. Finally, under a deceptive appearance of uniform backwardness, India is a country of enormous variation and long survivals; querns that might belong to the Stone Age are still used in our kitchens; red pigment on idols and stones by the road-side symbolizes blood-sacrifices most of which went out of fashion centuries ago so that the very idea would shock the particular worshippers. Thus, it is dangerous to attempt without a lifetime of study any complete description of an ancient and obsolete system. The method I follow, therefore, is to utilize a few representative sources (preferably with good published translations) of proved validity, outlining thereby the main developments. Greater detail is not possible without far more criticism, while the result would be unbalanced.

At every stage, I have tried to ask myself the question: What were the means of production implied by this particular bit of evidence? This is the only essential in which my approach differs from that of the essays available to me; it will be found to account for most of the differences in the conclusions.

2. The oldest Indian tradition known is supposedly that recorded in the four Vedas; in the order of sanctity and roughly of chronology, the *Ṛg-*,[7] *Yajur-*, *Sāma-*, and *Atharva-veda*.[8] These are liturgical books amplified in associated works called *Brāhmaṇa*[9] and *Āraṇyaka*. These scriptures concentrate upon ritual, any philosophy or history having to be painfully extracted, as with most early Brāhmaṇic sources. This contrasts greatly with the much more philosophic if somewhat later *Upaniṣads*, the earliest of which have strongly influenced Buddhism and are undoubtedly of Kṣatriya origin. It should be kept in mind that each of the Vedas with its associated subordinate works forms in ancient days the property of one particular clan or sect of Brāhmaṇas who developed the tradition over a long period. The difficult ritual could be mastered by the acolyte only after long study (generally twelve years of celibate life) in the absolute service of a *guru*, often in the wilderness. Later changes, therefore, are not easy to trace though their existence cannot be denied. The passing centuries have obliterated a good deal so that certain hymns and words convey no real meaning even to the most optimistic commentator, e.g. *RV*. X.106.6 which might be of Mesopotamian origin, as also perhaps the insistence upon clay bricks for the fire-altar, hardly to be expected of nomads such as the Aryans were in earlier Vedic times. The Iṣṭāśva and Iṣṭaraśmi of *RV*. I.122.13 may even be Achaemenid kings of the sixth century BC, which would not invalidate the claim to antiquity for the body of that Veda.

The *Ṛgveda* speaks of the four major castes, tribes being outside the then localized caste scheme. 'Brāhmaṇa was his (the Supreme Being's) mouth, Kṣatriya made of his arms; the Vaiśya his thighs, and the Śūdra generated from his feet' (*RV*. X.90.12), says the particularly sacred Puruṣasūkta hymn. Yet the four-caste system is not described as prevalent outside of India, where the earliest division into Ārya and Dāsa was known to persist.[10] These two racial (or tribal) names later become synonymous with noble or freeborn and subject or slave (*RV*. IV.28.4, II.12.4), the latter being the general Sanskrit meaning of *dāsa*, in much the same way as the (contested) etymological change from Slav to slave. Yet not all the Dāsas of the early period are slaves or enemies. Divodāsa Atithigva is ruler by favour of Indra who is at once the chief of the gods and historically the titular ruler of the Aryan invaders. Priestly Divodāsas are also described as writing new hymns in *RV*. I.130.10, while Sudās is the author of *RV*. X.133. Vāmadeva, author of an entire section in the oldest Veda, speaks of bitter times before the ruthless Indra gave him patronage: (*RV*. IV.18.12–13) 'Who made thy mother a widow? Who sought to slay thee in lying still or moving? Which *deva* (god) had compassion for you when thou tookest thy sire by the foot and smashed him? In extreme need I cooked a dog's entrails; among the *devas* I found no comforter. I beheld my wife in degradation.[11] Then the Falcon (Indra) brought me the sweet (mead).' On the other hand, the third section of the *Ṛgveda* is ascribed to the great Kṣatriya Viśvāmitra, whose prowess is belittled by Brāhmaṇic stories of his vain contest with the Brāhmaṇa Vasiṣṭha, supposed author of the seventh section of the same Veda. But the Vasiṣṭha (also called Tṛtsu, *RV*. VII.83.8) clan is associated in some way with Divodāsa and the Dāsas, hence originally belonged to the subjected population before climbing to the Vedic school. We see two main points here: the ancient Brāhmaṇa had a hard time; the priest class of the Aryan conquerors was largely recruited from the conquered.

The function of Vedic ritual is the celebration of certain animal sacrifices at the fire-altar. The five principal sacrificial animals are in order of importance: man, horse, bull (or cow), ram, he-goat (*SB*. VI.2.1.18), and their flesh was to be eaten as is seen from rubrics for the disposal of the carcasses, as well as by the prohibition that five animals who simulate these are not to be eaten, namely the *kiṃpurusa* or dwarf, bos gaurus, bos gavaeus, camel, and *śarabha* (*SB*. I.2.3). Cannibalism, however, is extinct except for ritual purposes in the Vedas; human sacrifice is rather a traditional survival[12] like the Roman formula for capital punishment, *sacer esto*. The great Vedic sacrifice is that of the horse. This deserves consideration for it was the horse that gave the Aryans (as it did the Mongols) their superiority in battle, made possible their mobility as nomads, though the animal was not ridden harnessed to a chariot. Indra's chariot is drawn by two tawny horses, yet his weapon, the *vajra*, is nothing but a stone hand-celt (identified with the thunderbolt when Indra became the synonym of the chief Aryan god) or perhaps a stone-headed mace of Sumerian type. We know that the principal Vedic weapon was the bow, that in addition to the horse and the chariot the Aryan invaders knew the use of iron. The Indus valley civilization knew only copper, weapons found in Mohenjodado being so poor as to be useless for any except ceremonial purposes. The Dāsa opposition, therefore, must have been poor though the Vedas speak of their fortifications (*RV*. II.19.6; VI.20.10).

The emphasis upon the horse-sacrifice (*aśvamedha*) must necessarily date from period when the horse was the most important domestic animal for the Aryans, or the Mongols in historic times. That period, however, had obviously passed on the Vedic age was at its zenith, for the emphasis as far as productive economy is concerned is upon cattle, pastured in herds. Ploughing is comparatively late, mentioned in the *SB* only for ceremonial purposes; even here, both the ploughed unploughed ground about the altar site must be sown after watering (*SB*. VII.8). The principal cereal is barley (*yava*) into which the gods had put the essence of all other plants (*SB*.III.6.1.10) and rice which was then obtained not by ploughing but by digging (*SB*. I.2.3.7). But the priests' regular fee is payable battle as for example at the Dasāpeya sacrifice for which twelve heifers with calf are due (*SB*. V.4.5.20), occasionally in gold chips, perhaps gold minas.

There is no question whatsoever of Brāhmaṇa superiority except at the altar-side. The Brāhmaṇa is acknowledged, even by himself, unsuited for kingship (V.1.1.12). Moreover, the aśvamedha is pre-eminently a Kṣatriya sacrifice (XIII.4.1.1.), at which apparently a Kṣatriya could officiate himself, the lame explanation being given '. . . and truly, whosoever sacrifices, sacrifices after being, as it were, a Brāhmaṇa' (*SB*. XIII.4.1.3). The Brāhmaṇa is an object aspect *after* the king (*SB*. V.4.2.7), and if the order of handing around the symbolic wooden sword used at the sacrifice makes the king weaker than the Brāhmaṇa, it is only to make the king stronger than his enemies (*SB*. V.4.4.15). social functions of caste are clearly set forth when it is stated that the Kṣatriya precedes on the outward sacrificial round, the Brāhmaṇa on the return, but never the other two castes. 'And thus he encloses those two castes (Vaiśya and Śūdra) both sides by the priesthood and nobility, and makes them submissive' (*SB*. VI.4.4.13).

Final proof that Brāhmaṇa superiority was only in ritual is given by the story of king Janaka (*SB*. XI.6.2), who defeats all the leading Brahmins, including the founder of the *SB*, Yājñavalkya himself, in interpretation of the philosophy of sacrifice as distinct from the ritual. The *sūtra* concludes with: 'Thenceforth Janaka a Brāhmaṇa'. In fact, the Brāhmaṇa was worthy of respect only because of connection with the *aśvamedha* ritual. 'Those Kṣatriyas who go to the end of (horse-sacrifice) will become (sharers of) the royal power, they will become worthy of being consecrated; but those who do not go to the end of this . . . will be excluded . . . And whenever ye meet with any kind of Brāhmaṇas, ask ye them 'O Brāhmaṇas, how much know ye of the *aśvamedha*? and those who know naught thereof ye may despoil' (*SB*. XIII.4.2.17).

3. For what follows, it is necessary to keep in mind certain general facts of agriculture. For a given area, the pastoral life will support from a dozen to a hundred times as many people as by hunting. Cultivation of cereals will support from four to twelve times as many as by grazing cattle for meat and dairy products. The present Indian population gets along today, admittedly at a very low subsistence level even in good years, on about 0.7 acres of cultivated land per head, while pasture land has long been insufficient for the number of cattle raised on it. Now, in a given region, as the population tends to increase, they must find a severe natural check, as in the extreme cases of the Arctic or the Kalahari, or must find more land, or change to a more productive form. The land of the Gangetic basin was swampy or densely forested while the older means of production developed in the drier Indus basin were profitable to an important class, the Brāhmaṇa priests, who had fixed upon certain religious forms which would hinder the development of any primitive community beyond a certain level. There was no trouble only as long as the system proved itself capable of expansion.

Even in the *Śatapatha Brāhmaṇa* days there was an ideological protest against beef-eating, presumably dictated or at least reinforced by economic necessity: The gods gave the cow and the ox the vigour of all other species; eating their flesh would be, as it were, an eating up of everything . . . 'Such a one indeed would be likely to be (re-)born as a strange being (as one of whom there is) evil report, such as he has expelled an embryo from a woman, he has committed a sin . . . Nevertheless, Yājñavalkya said 'I, for one, eat it, provided that it is tender' (*SB*. III.1.2.21). The very originator of the *SB*. tradition refuses to budge.

The expansion towards the east is also clearly recorded, as well as its methods. '(Agni, the fire thence went burning along the earth towards east (from the Sarasvatī river); and Gotama Rāhugaṇa and the Videgha Māthava followed after him as he was burning along. He burnt over (dried up) all the rivers. Now that river which is called the everflowing (Sadānīrā)[13] flows from the northern (Himālaya) mountain; that one he did not burn over. That one the Brāhmaṇas did not cross over in former times, thinking it has not been burnt over by Agni Vaiśvānara. Nowadays, however, there are many Brāhmaṇas to the east of it. At that time, it (the land east of the Sadānīrā) was very uncultivated, because it had not been tasted by Agni Vaiśvānara. Nowadays, however, it is very cultivated, for the Brāhmaṇas have caused (Agni) to taste it through sacrifices. Even in late summer that river, as it were, rages along: so cold is it, not having been burnt over by Agni Vaiśvānara. Māthava Videgha then said (to Agni) 'Where am I to abide?' 'To the east of this (river) be thy abode', said he. Even now this river forms the boundary of the Kosalas and Videhas; for these are the Māthavas (descendants of Māthava)' (*SB.* I.4.1.14–17).

The narrative is clear enough: the advance was by clearing land by burning it over, and swampy land thus dried up; the earlier drive was held up when the fire-followers came to a glacier-fed river which did not dry up in the summer. This means that the advance was not along the banks of major rivers, but along the foot-hills, and that is precisely what we find by looking through Buddhistic records of settlement. The riparian lands of the Gangetic basin must, with a few strategic exceptions, have been far too densely wooded and swampy to be cleared by fire alone. In any case, this type of early clearing would account for so many sacred places being in the Himālayas as well as for the late transfer of the capital of Magadha (Bihar) from Rājagṛha to Patna.

The Brāhmaṇas of this later period show a corresponding adjustment. The last of the four Vedas (*AV*) is a much more social document than the rest. From concentration upon the expensive fire-sacrifice, it has come down to everyday witchcraft, designed for personal gain of all social grades, though not to smooth out the difficulties of human intercourse. There are charms to cure disease and possession by demons of disease; prayers for long life; incantations for the obtaining of a husband or wife, a son; charms for royalty, and for success in battle. Far more important are the charms for harmony and influence in assembly for they show that Aryan tribal affairs were still regulated by assembly in spite of the conquest (*AV.* III.30; VII.12, etc.). Fields, the house, cattle, can be protected by formula; the seed is blessed at sowing (*AV.* VI.142), exercised of vermin infesting the grain *V.* VI.50). There are prayers for success in gambling (*AV.* IV.38; VII.50), and the merchant has his own prayer for successful venture (*AV.* III.15) with a hundredfold gain 'of wealth through wealth'.

Naturally, the Brāhmaṇa takes smaller fees, generally a porridge (*AV.* XI.1; II.3) prepared in a special way. But that doesn't mean that he has given up beef-eating. Sterile cows must be given away to the Brāhmaṇas;

if a heifer that has proved sterile after herding for three years be not given away to mendicant Brāhmaṇas, dire consequences will follow for both herd and owner; gain can only result by giving the creature to the Brāhmaṇas, though what they could do with it except eat it does not transpire; on no account is the owner to roast the barren cow for himself (*AV.* XII.4)! Beyond this, the Brāhmaṇa has to protect himself and his own cattle by imprecations, and cajolery (*AV.* V.18.3) 'do not, o prince (eat the cow) of the Brāhmaṇa: sapless, unfit to be eaten, is that cow'. Prince here means a knight, any member of the Kṣatriya caste with any sort of local power.

However, there is no question of the Brāhmaṇas turning 'their attention to the masses', except to help in their exploitation. The Brāhmaṇic idea of the position of the two lower castes is seen in the *Aitareya Brāhmaṇa* vii, 29 (A.B. Keith, H.O.S., vol. 25, p. 315): '. . . like a Vaiśya, tributary to another, to be eaten by another, to be oppressed at will . . . like a Śūdra, . . . the servant of another, to be removed at will, to be slain at will'. This view of the trader class characterizes the most penal theory of taxation which we find in the *Arthaśāstra*. The Kṣatriya here is at the top of the social stratification, for even the Brāhmaṇa is only one who receives sacrificial gifts from him; however, the Brāhmaṇa can embroil the Kṣatriya with the people by mischief at the sacrifice, so that the nobility have to be careful. Finally, we may note that the Vaiśya in the Vedas is merely an Aryan whose trade is not that of fighting or fire-priesthood; also, that honoured Vedic professions or crafts such as that of the tanner, weaver, smith, chariot-maker, are confined in later days to Śūdras, who are un-Aryan in the earliest days. This shows how the early caste system corresponded to the progressive development of a *class* society, which, with its counterpoise the absolute monarch, developed naturally from conquest and settlement by a democratic or oligarchic tribal organization which originally characterized the racially distinct invaders. A rudimentary four-caste (= class) system similar to the Indian can also be traced in Iranian tradition. It should not be forgotten, on the credit side of the caste system, that the early reduction of the *Śūdra* to serfdom or helotage freed India from slavery and slave-trading on a large scale. It also allowed new land to be opened up and settled with an early development of a stable agrarian economy which gave the country its economic power as well as its basic unity in spite of great local variations. Of course, when expansion stopped, this led inevitably to a static ideal of society, a static philosophy (even to the static yogic system of exercise), hence ultimately to stagnation. But we are not concerned here with that stage of growth where caste becomes a negation of history. It seems reasonable to conclude that the lack of private property in human beings also implied the absence of private property in land (except for valuable urban sites) at the early stage with which we are concerned.

As long as the Kṣatriya is one of a numerous conquering tribe, this is perhaps inevitable; the Brāhmaṇa has no protection except his own usefulness as priest and the mantle of the witch-doctor. But with the growth of settlement and kingship on a larger scale, the Brāhmaṇa suffers another dialectic change: 'Listen ye to the high praise of the king who rules over all peoples, the god who is above mortals, of Vaiśvānara Parīkṣit! 'Parīkṣit has procured for us secure dwelling, when he, the most excellent one, went to his seat'. (Thus) the husband in Kuru-land, when he founds his household, converses with his wife. 'What may I bring thee, curds, stirred drink, or liquor?' (Thus) the wife asks her husband in the kingdom of king Parīkṣit. Like light the ripe barley runs over beyond the mouth (of the vessels). The people thrive merrily in the kingdom of king Parīkṣit' (*AV*. XX.127.7–10).

This king Parīkṣit, here raised to the supreme eminence of deified fire, is a historical personage who came to the throne after the great war described in the epic, *Mahābhārata* (*Mbh.*). And the Brahmins who monopolized the *Atharva-veda* belong to the combined Bhṛgu-Aṅgiras clans. They are comparative late comers in the Vedic period for the Vasiṣthas alone claimed monopoly of the *yajña* priesthood at one time (Ṣadviṃśa Brāhmaṇa 1.5) and this was disputed by the Bhṛguid Jamadagni (Taittirīya Saṃhitā IV.1.7.3). With this, we turn to the great Indian epic.

4. The *Mahābhārata* epic deals in 100,000 stanzas[14] with a great civil war between the five Pāṇḍava brothers and the hundred Kaurava sons of Dhṛtarāṣṭra. Generally available texts of this work contain substantial additions down to quite recent times but we are fortunate in possessing a critical edition[15] for the first five books which strips away later accretions in a manner brilliantly confirmed by fresh discoveries of comparatively old manuscripts. This critical text represents in the main some kind of a unitary redaction by one or more diaskeuasts of not later than the third century AD, but the subject matter is far older tradition given in narratives not always properly worked into the structure of the epic. A good deal of this subject matter was obviously repulsive[16] to the scribes who transmitted the epic manuscript apparatus, but not on that account deleted by them; their method was to dilute the most disagreeable portions by explanatory interpolations, and just ignore the rest. The continued popularity of the text must have been due in great part to these

continually added and readjusted subsidiary narratives, and this popularity was not only very profitable to the reciters but performed an important social function by enabling them to write in a considerable amount of social and religious doctrine, the most important section of this type being the famous *Bhagavadgītā*. For us the use of the *Mahābhārata* lies in the picture of society that it builds up, though not always in a homogeneous or consistent fashion.

About the preservation of ancient tradition,[17] against the fact of radically changed custom, there can be no doubt at all. After the great battle, the dead are left to lie on the field. The princess Mādrī is purchased as a bride for Pāṇḍu without any more ceremony than for a basket of vegetables (*Mbh.* 1.105.4–5), though a long passage is interpolated in many versions to explain this as an ancient custom of her tribe, the noble Madras. The Brāhmaṇa Droṇa teaches archery to the princes for money, and this is explained by a brilliant and pathetic interpolation (after *Mbh.* 1.122.31) as reaction after seeing his little boy, who had never tasted cow's milk, tricked by richer men's sons with mixture of flour and water. As a matter of fact, however, the desire for money is real and quite straightforward, for a little earlier Droṇa has learned the decidedly un-Brāhmaṇic trade of arms only because he could not get the alternative, wealth (*Mbh.* 1.121.18–21), from Paraśurāma. Even more striking is the evidence regarding diverse marriage customs, particularly group-marriages in the older period. The sage Śvetaketu, son of Uddālaka, is disturbed in his wilderness retreat when a Brāhmaṇa drags off his mother by the hand with the words 'let's go'. To the angry sage, his unperturbed father gives the explanation 'women of all castes are unrestrained (or *naked*); like cows, they (breed) progeny within each caste'. Uddālaka's simile, we remark parenthetically, receives some support from the etymology of *gotra* (clan) which means 'cowpen'. Śvetaketu then establishes the rule by force (*balāt*) that women shall be monogamous and men shall not violate a virgin, a chaste woman, or a continent one. All of this is given as a tradition (*Mbh.* 1.1.13.9–20). But this is not the only curious tradition, for *Mbh.* 1.112 is devoted to the unattractive story of king Vyuṣitāśva whose childless queen Bhadrā finally conceives from his corpse. A survival of group marriage customs seem to me to be a better explanation of the five Pāṇḍava brothers' polyandrous union with the princess Draupadī than the hypothesis that these Pāṇḍavas were Tibetan invaders. In fact, Yudhiṣṭhira says to his shocked prospective father-in-law, who regards polyandry as being against common usage and the

Vedas, that he (Yudhiṣṭhira) doesn't claim to know the finer points of region, but 'we wish to follow the ancient traditional path' (*Mbh.* 1.187.26–8). The mother of the princes cites the case of the seven sages who had a common wife Jaṭilā (*Mbh.* 1.188.14); finally Vyāsa, reputed author of the *Mbh.* turns up in person to explain the whole affair as inevitable by the convenient hypothesis of a curse in one previous birth! Clearly, we have here some historic pre-Aryan custom which had to be explained away. It is not a theological addition as for example the regaining of her virginity by Kuntī (*Mbh.* 1.104.12) or by Draupadī (*Mbh.* 1.191.14) which were necessary if the later official marriages of these ladies were to be valid.

This welter of contradictory traditions, apart from diverting interest, has damaged even the main theme of the war. The Pāṇḍavas have no less a personage than Kṛṣṇa, incarnated Viṣṇu, on their side, and this god is thereafter one of the most important deities of the Hindu pantheon. But they win only by consistent cheating and legalitarian quibbles. The twelve years during which they agree to remain incognito in the wilderness are not really over when they reveal themselves; the noble and venerable Bhīṣma, their own teacher Droṇa are killed by deceit; the heroic and generous Karṇa (actually their brother) treacherously shot down against the rules of war; Duryodhana's thigh is shattered by a foul blow. Such dealings, combined with the tradition that Jaimini's rival version of the *Mbh.* (a fragment of which is still in existence) was destroyed because it did not exalt the Pāṇḍavas sufficiently as against the defeated Kauravas, have led to the theory that the epic has been rewritten from its original form of a lament for the vanquished into flattery for the conquerors. As a matter of fact, evidence of rewriting is only too noticeable, but the purpose is deeper than mere flattery of some historical dynasty.

The *Mahābhārata* (like the *AV* and the law-code *Manusmṛti*) also was property of the Bhārgava clan, who rewrote[18] it for their own purpose. Their hero, the Bhārgava Paraśurāma, seems to have been the only authentic Bhārgava who could fight (his traditional weapon being the curved axe *paraśu*) and who annihilated the Kṣatriyas no less than twenty-one times. This superfluous killing is really a form of overcompensation, or psychological revenge; for it is clear that the Bhṛguids were generally trampled down, the Kṣatriyas not annihilated, and that a single annihilation should have sufficed. The revenge is carried further in unconvincing fashion by stating that successive generations of Kṣatriyas had to be begotten by Brāhmaṇas from Kṣatriya women. The fact of the matter is that the Brāhmaṇas were helpless; when Bhṛgu was offended by the Sṛñjaya Vaitahavyas or a Brāhmaṇa's cow taken, it was the slaughtered cow herself and not the owner that took revenge upon the transgressors (*AV*. V.18.10–11; V.19.1). The Bhṛgus appear as a historical people in the *RV*, but only three or four times. They are undoubtedly associated with the Druhyus, though whether as warriors or as priests is not clear for the Bhārgava chariot appears in *RV*. IV.16.20. Moreover, they were on the losing side, for the king of the Druhyus was killed in battle against Sudās. We have here one possible mechanism by which the conquered sages could appear as priests[19] of the conquerors, for by this time the Aryans had unquestionably begun to fight against each other, having advanced as far east as the Yamunā river. Still, we see from the Paraśurāma legend that the Brāhmaṇas at one time attempted fighting against the Kṣatriyas, and this should lend support to the conjecture that the Brāhmaṇas belong to an older type of society than the invading Aryan Kṣatriyas. How could they have developed any sort of culture had they always been living in the wilderness, either solitary or each sage with his women and a handful of celibate disciples? It is at least plausible to assume that these Brāhmaṇas were associated with the rich pre-Aryan Indus valley culture, discovered by our archaeologists; a culture that may have been destroyed by Aryan invaders or died out because of the shift of the Indus. This passage-over of sections of the conquered as priests to the conquerors would account for the many discrepancies between Vedic and epic records, and for the rewriting of so much Indian tradition. It would account also for the early systematic development of Sanskrit grammar, generally necessary when a complicated foreign language has to be studied. In the same way, the astounding development of religious philosophy in India at a very early date again supports the hypothesis of violent assimilation as it speaks for the unhappy existence of a cultured priest-class. One notes that though the Aryan system of counting is decimal, if any system can properly be called Aryan, the quadragesimal system is still extant in Indian currency, goes back to the dual weight-system of Mohenjo-Daro, and is reflected in Piṅgala's work on Vedic metre. The Brāhmaṇa sages in the wilderness when correspond to Abraham, who left Ur of the Chaldees for a nomadic life when the days of the city's glory had passed; of course, the Brāhmaṇas may have been driven out by the ruin of their cities, and had in any case a fairly hard time of it: retreat to the wilderness, particularly in old age, remains thereafter an integral portion of the ideal human life for Hindus. Naturally, such origins would also account for several features of caste, including endogamy.

For the later stage of rewriting in the *Mahābhārata*, we see one further immediate rerason: the pre-existence of Buddhism. In the main, all direct reference to Buddhism is carefully avoided in the epic, which does its best to give the (modified) traditions of antiquity. Still, in the appendix,[20] the *Harivaṁśa* (cited as *Hv.* from Kimjavadekar's edition), we find direct mention of the fact that well got-up Śūdra monks would get religious honour as followers of the Śākya Buddha (*Hv.* 3.3.15) while Brāhmaṇas took to the woods for fear of taxes. All such historical events of later date are ingeniously disguised as prophecies; this section of the *Hv.* has influenced two parallel 'prophecies' in *Mbh.* 3.186–9, about the dark ages, the Kaliyuga which begins with the coronation of just that king Parīkṣit who was so highly praised in the *AV*. Naturally, as part of the prophecy, it is not out of place to mention—indirectly—Puṣyamitra (*Hv.* 3.2.40) as having performed the horse sacrifice before the end of the Kali age. One is led to believe that the Kalki (later the future avenging incarnation of Viṣṇu) with whom the Kaliyuga is to end (*Mbh.* 3.188–9; *Hv.* 1.41.164–8) is also a historical personage, some minor leader who locally repelled invaders that pushed into India over the ruins of empire after the first century BC. He managed to please the Brāhmaṇas by reviving fire-sacrifices. What speaks most distinctly for the existence of some intermediate form between the Vedic and the epic period, however, is the rise of new deities, and the profession of a new philosophy. The epic is read by or recited to modern Hindus, and in spite of its numerous logical inconsistencies, is within their mental grasp; the Vedas are not.

Vedic deities, Indra and the sacred fire, occur often enough, but in a subordinate position. Some of the elements that appear can be discounted as ancient survivals, particularly the *avatāras* of Viṣṇu which contain a typical later Brāhmaṇic synthesis of various cults—of which the Fish, Tortoise, Boar, may even be Mesopotamian, connected as they are with the legend of the flood which actually was a historical event according to Woolley's excavations at Ur. The dwarf Vāmana may represent some struggle of the Aryans against Assyrians, as perhaps his predecessor the man-lion Nṛsiṃha. Paraśurāma is a Bhārgava hero, Rāma some ancient Indian hero apparently pre-Aryan, though with him the psychological element may account for the Helen-of-Troy motif. Psychoanalysts have taught us to regard such themes as Karṇa's being set afloat on the river by his mother and drawn from the waters by his foster-parents as a symbolic representation of birth;[21] this may also account for the sage Mārkaṇḍeya's vision (prototype of Arjuna's vision in the *Bhagavadgītā*) of the divine Babe asleep on the flood (*Mbh.* 3.186.82–3.187.47). But the latest *avatāra* Kṛṣṇa is the dominating religious figure of the *Mahābhārata*, and his cult, all-embracing faith *bhakti* in the one supreme being, has appeared for the first time in contrast to anything that has preceded. This Kṛṣṇa, the non-Aryan[22] 'dark' hero or god has appeared in several earlier legends, as Kṛṣṇa-Dionysos, Kṛṣṇa-Herakles, Kṛṣṇa the Lar of the Yadava tribe, even as an opponent of Indra in a contested passage of the *Ṛgveda* (*RV*. VIII.96.13–15), but not in the role of an object for salvation-giving *bhakti*. *Kṛṣṇa* generally appears as an adjective for the 'dark people', the indigenous opponents slaughtered by the Aryans. It is remarkable that Vṛtra, the demon of darkness for whose killing Indra is praised in the Veda (and as Verethraghna in Avestan tradition) counts as a Brāhmaṇa in *Mahābhārata* times. That Indra kills his own fire-priest (purohita) Viśvarūpa is surely proof that the Brāhmaṇas are not inviolate in Vedic days. But the heroes of the epic, the Pāṇḍava brothers, are already a mixed lot, Arjuna being dark, as is also their common wife Draupadī.

Similarly, the all-powerful position of certain Bhārgava sages who even seem to beget a considerable number of Kṣatriya princes can be explained psychologically, but not so the strange doctrine of *ahiṃsā*, non-killing, uttered by a curse-transformed sage. '*Ahiṃsā* is the supreme religion for all living beings, therefore let the Brāhmaṇa not kill living things; ahiṃsā, truthful speech, resolute forgiveness, mastery of the Vedas are the highest religion of the Brāhmaṇas' (*Mbh.* 1.11.12, 14). This has a very strange sound indeed in a huge work dedicated to tales of slaughter, recited at Nāga-killing *yajña* sacrifices, a work in which the heroes and even the god Kṛṣṇa himself, with attendant Brāhmaṇas in plenty, clear land in the Vedic manner by burning down the entire Khāṇḍava forest and killing those who try to escape, in a holocaust which only six living creatures survive (*Mbh.* 1.214–19). The explanation of these anomalies is, naturally, the intermediate position of a totally new form of life, that during the Buddhistic age, which necessarily forced changes upon the Brāhmaṇas.

5. Vedic Brāhmaṇism had already become uneconomic in the days of the Buddha. Instead of the moderate fees of Vedic times, we find whole villages given over to the Brāhmaṇas in fief for their services at the sacrifice, though of course it was only the more fortunate Brāhmaṇa that would receive such gifts. In the *Dīgha-nikāya* 3, 4, 5, 12 we learn that king Pasenadi had given the village of Ukkaṭṭhā to the Brāhmaṇa Pokkharasāti, Mālavaṭikā to another, Lohicca; from Bimbisāra, special friend of the Buddha, the Brāhmaṇas Soṇadaṇḍa and Kūṭadanta held Campā and Khāṇumata respectively. Naturally, the sacrifices implied by such fees are on a much greater scale than those of the Vedas. In the *Kosalasaṃyutta* we read of king Pasenadi's great *yajña* where 500 (in early Pāli literature

the equivalent of 'a large number') each of bulls, male and female calves, goats, rams were tied to sacrificial posts for killing, and the king's slaves, messengers, workmen go about their duties shedding tears,[23] in fear of punishment; for, apparently, the beasts were taken without compensation from the surrounding countryside. The Buddha himself speaks of five great traditional *yajñas*; the *aśvamedha*, the human sacrifice, the *samyakpāśa*, the *vājapeya*, and the *nirargala*. Of these the first two are Vedic and even the fourth is known to Vedic literature, though more complicated. But the remaining two are not generally known and there is no reason to doubt that sacrifices were growing in complexity and magnitude. The Buddhist protest is therefore against sacrifices rather than against caste[24] as such, though naturally it would affect the caste that lived by sacrificial fees, the Brāhmaṇas. On the other hand, these sacrifices imply other types of killing than at the fire-altar, for their main purpose is success in war. The older type of society has passed. Aryans are no longer migrants or wanderers with the possible exception of a tribe like the Vajjis,[25] who also preserve the older tribal institutions including supreme power for the oligarchic assembly (upon which the Buddhist monastic order of peripatetic almsmen was modelled in its own way), and are much admired by the Buddha himself. For the rest, the tribes have dissolved into loose organizations of landholding and landfarming overlords, and because of this dissolution, newer types of kingship on a large scale are growing up. For example, Buddha's own people the Sakkas are not independent, being subordinate to king Pasenadi of Kosala (*Dīgha-nikāya* 27); while Buddha's father is so small a princeling that he engages in ploughing, perhaps of a ceremonial nature, but in the fields and not for the fire-altar. The Sakkas still elect[26] a tribal chief who seems to have had very little to do. The *gotra* divisions for Kṣatriyas clearly corresponded to the *gens* elsewhere, and was adopted (and retained to this day) by the Brāhmaṇas if they did not have it themselves in earlier times. It is significant that a considerable number of *gotra* names are animal totems:[27] *kauśika* = owl, *kāśyapa* = tortoise, *bharadvāja* = skylark, *gotama* = best bull, while the oldest Brāhmaṇas like the Vasus can at most be assigned descent from the sun and the Bhṛgus have no animal totem to explain their ancestor. Similarly, the *pravara* is clearly the original phratry, its confused position being more easily explained if the whole gens-phratry organization was borrowed by the Brāhmaṇas from the Kṣatriyas after the conquest.

The Buddhistic world is divided into small cities grouped under sixteen kingdoms (*Aṃguttara-nikāya* III.7.70; trans. I, p. 192), some of which have already lost their independence and the rest of which are constantly fighting to increase their rules, whence the need for fire-sacrifices that bring victory. The centre of expansion is Magadha (the eastern part of modern Bihar) itself peripheral in the older Aryan-Brāhmaṇic expansion. It is Ajātasattu, parricide son of Bimbisāra who finally breaks the Vajjis and extends his dominion to the whole Gangetic basin; in the *Sāmaññaphalasaṃyutta*, he is praised as a wise ruler, one who would have reached the highest degree of spiritual attainment—but for the sad fact of his having murdered his own father! Clearly, the traders and householders needed a settled rule, peace and freedom from robbers who infested the jungles between city-states, some form of 'universal' monarchy; it must again be noted that Buddhism and the other non-killing religion Jainism are most popular with this class, which is otherwise silent in Indian history.

The existence of the protest we have already seen in the *Śatapatha Brāhmaṇa* passage against beef-eating, though beef continued to be sold in the open market in Buddha's time (*Satipaṭṭhānasutta*). The original proponent of the new ideas for society was the Jaina *tīrthaṃkara* Pārśva, who laid emphasis two centuries before the Buddha upon the active social practice of non-killing, truthfulness, non-violence. There were other lines of teachers[28] who had developed from the ascetic hermits whom Brāhmaṇism itself regarded so highly and Buddhist as well as Jain teachers found the pre-existing ascetic form of life one which gave the preacher greatest influence. Jain *ahiṃsā* was carried to unpractical extremes for society as a whole, while the Buddhist applied primarily to human beings and agricultural animals: for the Buddha says in the *Brāhmaṇadhammika-sutta* of the *Suttanipāta* 'Cattle are our friends just as parents and other relatives; for, cultivation depends upon them. They give food, strength, freshness of complexion, and happiness. Knowing this, ancient Brāhmaṇas did not kill cattle.' But the greatest power of the Buddhist doctrine springs from its social nature as against the rugged individualism or greedy opportunism of other systems. In the *Kūṭadanta-sutta* (*Dīghanikāya* 5) the Buddha relates the story of a supposed king Mahāvijita who gained happiness and prosperity for his people not by *yajña* but by supplying capital to the trader, employment to the State servant, seed to the farmer for 'then the robberies will vanish'. In the *Cakkavattisīhanada-sutta* we find the same theme enlarged upon. It is the poor that take to robbery, and the function of the *cakravartin*, the universal monarch, is to prevent robbery; it cannot be suppressed by violence, nor can its cause, poverty, be bribed out of existence with bounties. Poverty is to be decreased by creating employment. This, surely, is a sound and remarkably modern view of the problem. While the Buddhist emperor Aśoka did not go so far as this, his very first edict sets the example of non-killing.

To the question of *why* the new form had to arise, we have answered that the older was uneconomic after the change from nomadic pasturing to settled agriculture. Why it had to take on a religious aspect is clear enough, for the older form was bound up with the very existence of a class that lived by sacrifice; hence, the validity of the sacrificial idea, of killing itself, had to be denied; the revolution, inevitably in primitive times, had to take on a religious aspect. The actual mechanism of the change is by preaching through the mouths of respected ascetic teachers. But there is something more to the change than this. In the first place, it occurs in marginal lands, where the Vedic forms are not well-established and where the tendency to universal monarchy is growing rapidly. The Brāhmaṇas themselves show strong divergence from Vedic practices, for Magadhan Brāhmaṇas are referred to with special contempt as *Brahmabandhu*, being definitely associated with extra-Vedic Vrātyas, while it is not generally noticed that the *Purāṇas* refer to kings of the line to which Bimbisāra and Ajātasattu belong as *kṣatrabandhu*,[29] the termination *bandhu* having the force of the Italian—*accio*. Brāhmaṇas are themselves penetrating into hitherto unknown regions as pioneers, which is seen from the story of Buddha's disciple Bāvarī, who had founded a Brāhmaṇic refuge on the banks of the Godavari; but this expansion takes place without a corresponding Kṣatriya conquest, which should account for the existence of only two major castes (Brāhmaṇa, Śūdra) in South India. Clearly, such civilization as existed had managed to develop expansionist tendencies in a larger population in a way that the cattle-breeding Vedic period could not do. Magadhan is synonymous with trader in *Manusmṛti* 10.47.

The cow does not thrive in wet lands, though it could have done well enough in the Indus valley. The cow is not hardy enough to hold out against wild beasts in the forest. The swampy lower territory of the Gangetic basin could only have been opened out for a new type of agriculture, wet-rice cultivation, by a new animal, the less edible water-buffalo. I suggest that the period of this change also corresponds to change from the older Brāhmaṇism to non-violent religions, though such changes have left virtually no trace in literature. Vedic rice is *vrīhi*, while the general Vedic term for cereal is *yava*, barley, and the Vedas speak also of *godhūma*, wheat. The famous *śālī* variety of rice, though known early in the Punjab (where the grammarian Pāṇini comes from the village of Śālātura) seems to be principally cultivated in Bihar, even as late as the time of the Chinese traveller Hiuen-Tsang. The buffalo is not a Vedic animal at all, and must have been a terrifying beast in earlier times for Yama, the god of death, comes riding on it to claim the souls of human beings at their final moments; Yama himself, with his twin sister Yamī, shows definite Mesopotamian affinities or possibly origin.[30] The goddess Kāli or Durgā, afterwards synthesized by Brāhmaṇas with Pārvatī, consort of Śiva, saves mankind by killing the buffalo-demon, an act still commemorated by buffalo-sacrifices at her festival. The buffalo is rare while the horse does not occur on Mohenjo-Daro seals, where the bull is common. *Mahiṣa* in the Vedas is an adjective, meaning powerful, and *mahiṣī mṛgaḥ* means just the 'powerful beast'. But by the time of Pāṇini *mahiṣmat* 'rich in buffalos' is a term of respect. The *Kāśyapa saṃhitā* represents a forlorn Brāhmaṇic attempt to preserve the superiority of the cow, in that the buffalo is a wilder creature, feeding in the woods on leaves that might bear insects and spoil its milk. But it is known to all modern observers that in reality the buffalo is far the cleaner feeder of the two, the cow (like the pig) being a scavenger in densely settled localities. By the opening centuries of the Christian era, the buffalo is bred regularly for profit, ranking in this above the cow and below the horse, according to the *Pañcatantra* (V.8). It is the change-over to this new productive method that would enable Brāhmaṇic control of ritual to be overcome in times when ritual was all-important, for the Brāhmaṇas hadn't then troubled to develop any ceremony connected with the buffalo in the same way as the Vedic ritual is related to the cow.

Thus we get the dark ages of the Brāhmaṇas, though a few of them gained wealth as ministers, while four even ruled as kings[31] after the end of the Śuṅga dynasty; but a disastrous period for most of them by reason of the decay of fire-sacrifices. It would be centuries before Buddhism in its turn became uneconomic by growth of rich monasteries, and useless to the masses by its isolation. In that interval, the Brāhmaṇa had learned to adjust himself to reality without facing it. New deities had been found, and many local deities synthesized by the *avatāra* theory or as synonyms for one of the major gods. The power of the synthetic method is shown by Buddha himself being counted as the ninth *avatāra* of Viṣṇu. On the other hand, Buddhist monasteries were already becoming huge uneconomic foundations. The increasing number of Brāhmaṇa converts led by the second century to a change from the peoples' languages to Sanskrit for Buddhist writings; the writings themselves deal with abstract philosophical speculations which show that the monk had developed from the peripatetic almsman visualized by Buddha as a teacher of society into a parasite whose existence was bound up with that of the exploiting classes. Control of ritual always vested in the Brāhmaṇas, the Buddhist never having disputed it nor the cults of deities[32] (of whom the Buddha is *not* one though Vedic gods are made to do him honour in Buddhist legends); caste, after all, we have seen to correspond to social classes, when viewed as a whole. New tribes could be enrolled by writing new scriptures, rewriting old ones, or treating them as new castes, explained at first as generated by various mixtures of the older four. On the other hand, what resistance there was to invaders after the ruin of the Śuṅga empire, particularly in the first century BC seems to have been supported by fire-sacrifices if not inspired by the Brāhmaṇas in the name of religion, while there is no possibility, or at least no records of Buddhist monks having done so. The Brāhmaṇa had personal property and a family. He had the ritual for success in battle. He also had some experience of, or at least contact with, administrative problems, as we see from the *Arthaśāstra* which is Brāhmaṇic with a tradition of preceding Brāhmaṇic works on statecraft; in fact, the commonest Sanskrit word for minister, *mantrin*, means the possessor of a magic formula, which implies a Brāhmaṇa. The Buddhist monastic order excluded by its very structure all such activities. We have a letter of the Buddhist monk Mātṛceta to a king asking him to spare animal life (F. W. Thomas, *Indian Antiquary*, XXXII, 1903, pp. 347–9; 1904, p. 21; 1905, p. 145), but there is no question of organizing any resistance. The synthetic method was of great use in absorbing all victorious foreigners except those who, like the Mohammedans, had a strong proselyting religion of their own and could recruit low castes. In fact, many foreigners in later times seem to have used conversion to Jainism or Buddhism as an intermediate (though not indispensable) step towards enrolment a generation or two later as Brāhmaṇas or Kṣatriyas, their social position permitting.[33] The Brāhmaṇa could ignore productive imports or utilize them: paper (like gunpowder) came from China with the Mohammedans, and was used by the Brāhmaṇas for writing, though manufactured usually by Muslims in India. The Mohammedans brought other Chinese influences which do not seem to have spread, as for example porcelain tiles, the unquestionably Sinoidal minarets of the Boli Gumbaz at Bijapur, and possibly, some dome forms. But the rose that they introduced into the country was and is used even by the most orthodox Brāhmaṇa in worship (syphilis and tea belong to the European period).

The main Brāhmaṇical readjustment was the doctrine of non-killing engrafted upon the older ritual. The dying out of fire-sacrifice, loss of the heady Soma drink and of beef-eating, did not matter as long as the basic economic unit of the country was the village, and means of production agrarian with primitive methods of peasant cultivation, without private or at least without capitalistic ownership in land. Ritual is preserved hereafter with such changes as were thrust upon it by force of circumstances, but for every innovation we find a claim of antiquity, usually fictitious. Even the *Allopaniṣad* and the *Āṅglapurāṇa* become possible. The reason is that no matter what the form of the ritual, its content and social function is now of a fundamentally different nature. Primitive magic tried to control nature and increase production while later observances and tabus are primarily for the maintenance of the *status quo* in favour of a definite class. They do their best to stifle criticism, to absorb any destructive excess of social energy. When this stage is reached, we have the static ideal of caste. History loses its meaning.

NOTES

1. *India Census Reports*; E. Senart: *Caste in India*—Tr. E. Denison Ross, London, 1930; H.H. Risley, *Manual of Ethnography for India*, Calcutta, 1906; *The People of India*, Calcutta, 1915; Fick's comprehensive and attractive work, *Die sociale Gliederung im nordostlichen Indien zu Buddha's Zeit* (1897) is unfortunately based upon the *Jātaka* stories which, though they contain very old legends, can hardly be said to represent the social structure of Magadha at the time of Buddha, having been written much later, perhaps as late as the second century AD.
2. Paul Rosas: 'Caste and Class in India', *Science and Society*, vol. VII, 1943, pp. 141–67 and my own criticism, ibid., VIII, 1944, pp. 243–9.
3. *The Oxford History of India* by V.A. Smith, 2nd edition revised and continued to 1921 by S. M. Edwardes; Oxford, 1922, p. 25.
4. *Caste and Race in India* by G.S. Ghurye, London, 1932, p. 67.
5. *Aṅguttara-nikāya* 1.14. English translation by F.L. Woodward: *The Book of the Gradual Sayings*, vol. I (London, Pāli Text Society, 1932), pp. 16–25; and the commentaries thereto.
6. Cf. V.V. Mirashi: 'Gāṅgeyadeva of Tirabhukti'; *Annals of the Bhandarkar O.R. Institute*, vol. XXIII, 1942, pp. 291–301.
7. Cited as *RV*; any of the standard translations may be used, even the out of print versions of Griffiths or Grassmann.
8. Cited as *AV*, using the translation (if selected portions) by M. Bloomfield, *Hymns of the Atharva-veda*, Oxford, 1897 (Sacred Books of the East, XLII).
9. Of these, I cite for brevity mostly the *Śatapatha Brāhmaṇa* (associated with the *Yajurveda*) as *SB* from the English translation by J. Eggeling in Sacred Books of the East, vols XII, XXVI, XLI, XLIII, XLIV; Oxford, 1882–85–94–97–1900. Used

and highly recommended for the general reader, but not cited is the *Vedic Index of Names and Subjects* by A.A. Macdonnell and A.B. Keith, 2 vols, London (Murray), 1912.

10. Even in later times, The Buddha says in the *Assalāyanasaṃyutta* of the *Majjhimanikāya* 'O Assalayana, in Yona, Kamboja, and such frontier regions, there are only two castes: Ārya and Dāsa; and sometimes an Ārya becomes a Dāsa while a Dāsa becomes an Ārya. Do you acknowledge this?' The young Brāhmaṇa Assalāyana admits that this is so. For Divodāsa Atithigva, cf. H.D. Velankar, *Annals of the Bhandarkar O. R. Inst.*, XXIII, 1942, 657–68. *Manusmṛti* 10.45 implies the existence of Aryan-speaking people outside the fold of caste.
11. I follow the Brāhmaṇic tradition of Sāyaṇa's gloss and *Manusmṛti* 10.106 in ascribing this to Vāmadeva himself, while scholars like Geldner and Velankar interpret this *ṛk* as Indra's.
12. But king Hariścandra, in fulfilment of a vow to sacrifice his eldest son, begins to sacrifice a human substitute. Kalmāṣapāda is a cannibal (*Mahābhārata* 1.176) because of a curse. Human sacrifice later becomes symbolic just to avoid cannibalism, *SB*. XIII.6.2.13. The last human was traditionally by Śyāparṇa Sāyakāyana (*SB*. VI.2.1.37 seq.).
13. On the basis of Sāyaṇa's gloss which cites *Amarakośa* 1.10.33, this river has been identified with the modern Kurrattee by Weber and others. However, commentators on the *Amarakośa* take the *Karatoyā* and the *Sadānīrā* as two separate rivers. Prof. D. Kosambi's emendation of a single letter in Sāyaṇa's text of the *Aitareya Āraṇyaka* 2.1.1, to read *vaṅgā-magadhāścerapādāḥ* would give excellent meaning to the passage on which Sāyaṇa's commentary on this and *RV*. VII.101.4 is quite absurd. The sense then would be that *the people of eastern Bihar and nomads (or gypsies) did not believe in Vedic ritual.*
14. For the actual number, and criticism of the structure of the epic, see my paper on the *Parvasaṃgraha, J. Am. Oriental Soc.*, vol. 66, 1946, pp. 110–17.
15. By the late Vishnu S. Sukthankar. I cite only this edition, as *Mbh.* A passable translation exists (though not used here) by P.C. Roy, Calcutta, 1883–96, but as this is based upon the Vulgate text (Calcutta, 1836), references will not coincide.
16. E.W. Hopkins: *The Great Epic of India*, New York, 1901. This again refers to the uncritical Vulgate text, but is quite useful. For the point in question, see the concluding chapters.
17. For the relationship between the *Mbh.* and the rewritten *Purāṇas*, cf. W. Ruben, *J. Royal Asiatic Soc.*, 1941, pp. 247–56; 337–8; *F.W. Thomas Festschrift*, pp. 188 sq. For the most reasonable attempt to reconstruct some historical truth from Purāṇic records: F.E. Pargiter, *Ancient Indian Historical Tradition.*
18. V.S. Sukthankar: *Epic Studies VI*: The Bhṛgus and the Bhārata; *A Text-Historical Study. Annals of the Bhandarkar O.R. Inst.*, XVIII, 1–76; *Collected Works*, vol. I, 278–337.
19. The special position of the Bhṛgus is due to a fact not brought out in Sukthankar's profound analysis of the *Mbh.*, namely that they were able to assimilate Kṣatriya priests by adoption. Vītahavya becomes a Bhṛguid Brāhmaṇa by the word of

Bhṛgu himself, according to *Mbh.*, 15.30 (Vulgate) in spite of the Sṛñjaya Vaitahavyas being accursed in *AV* passages cited! The canonical Sanskrit writings on *gotra* and *pravara* have been collected by P. Chentsal Rao: *Gotrapravaranibandhakadamba*, Mysore (Govt. Or. Lib. Series, Bibliotheca Sanskrita, 25), 1900. The introduction shows that the last ten of the eighteen official Brāhmaṇa clans, i.e. the 'occasional (*kevala*) Bhṛgus or Aṅgirasas' adopted Kṣatriyas extensively. The current interpretation is, naturally, that these were originally Brāhmaṇas who had followed the trade of arms for a while and so had to be readopted into the priesthood, but a look at the genealogies shows conclusively that they are Kṣatriya by lineage. This means, clearly, assimilation of the priest-caste of the conquerors into the Bhṛgu-Aṅgiras clan of the conquered.

20. Though it ranks as the appendix, actually this section of the *Hv.* at least is the prototype of the two prophecies in *Mbh.*, 186–9. A detailed comparison shows content as well as phrases in common, as for example between *Hv.* 3.3.12 and *Mbh.* 3.188.51 = 3.186.36; generally between *Hv.* 4.3–4 and *Mbh.* 3.186, 188. The *Hv.* account is shorter and more coherent, as well as more *reasonable*. For example, *Mbh.* 3.188.47–8 paralleled by *Mbh.* 3.186.52–3 says on describing the evils of the dark ages that girls would give birth to children at the fifth or sixth year, males would beget them at seven or eight, and that the limit of life would be sixteen years. The last two figures are 16 and 30 in *Hv.* 3.3.11 and 3.4.40. The general Paurāṇic list of evils of the Kali age is entirely different. The relationship between these sources and the *Purāṇas* is very complicated; one possible explanation would be that various local accounts were later arranged in uniform chronological sequence. Taxing Brahmins is naturally the supreme evil (*Manusmṛti* 7.133), no matter how desperate the need!
21. Otto Rank: *Der Mythus von der Geburt des Helden*, Versuch einer psychologischen Mythendeutung [2nd Edition, Wien, 1922]. Matter for the psychoanalyst are also the excessive ritual purification of the Brāhmaṇa, the purely theoretical classification of metres many of which seem never to have existed, the fantastically large number of years in some *yuga* systems, the minute divisions of space and time which seem well beyond the power of definition of any instruments these theorists could even have imagined.
22. Apart from their dark colour, tradition also removes both Kṛṣṇa and Arjuna from the Kṣatriya caste, though they are fighters, cf. Pāṇini 4.3.88–9. Of course, the commentator here tries to explain this away by saying that being a divinity, Kṛṣṇa could not be ranked as a Kṣatriya.
23. Also, *Majjhimanikāya*, 51.
24. Against Brāhmaṇic caste-superiority pretensions, cf. the *Vāseṭṭhasutta* which occurs both in the *Suttanipāta* and the *Majjhimanikāya*. For all Buddhistic references I have drawn extensively upon the Marathi writings of my father Prof. Dharmananda Kosambi; particularly *Bhagavān Buddha* (Nagpur, 1940–41) and *Bauddha Saṃghācā Paricaya*.
25. For the Vajjis or Licchavis, the *Mahāparinibbāṇasutta* of the *Dīgha-nikāya*. Under *vrātya*, Macdonnell and Keith (note 9) show that wandering non-ritual

Aryans were meant, and this seems to be equivalent to the Vajjis, though naturally the Brāhmaṇic connotation of *vrātya* later comes to be a low person, while the Licchavis remain Kṣatriyas very high in social rank, even to a thousand years later, cf. *Oxford Hist. Ind.*, 147–8, and Samudragupta's inscriptions in Fleet's collection. See also J.W. Hauer: *Der Vrātya: Untersuchungen über die nichtbrahmanische Religion Altindiens*; vol. I: *die vrātya als nichtbrahmanische Kultgenossenschaften arischer Herkunft* (Stuttgart, 1927). It may be noted in this connection that the noblest truths, aims, ways are indicated by the adjective *ārya* in Buddhist scriptures. *The new religion founded by the Buddha looked to that branch of the Aryan tradition which* (in spite of *AV.* XV) *was not penetrated by the Brāhmaṇas.*

26. For the non-hereditary Sakka chief (king), see the story of Bhaddiya in the *Cullavagga* (vii) of the *Vinaya Pitaka* (Tr. H. Oldenberg, *Sacred Books of the East*, Oxford, 1885, vol. XX, pp. 227–30); for Suddhodana and all his 'courtiers' setting their own hands to the plough, the introduction (*Nidāna*) to the *Jātaka* stories (C. Warren, *Buddhism in Translations*, H.O.S., vol. 3, 1922, p. 54).
27. Remnants of totemism or an attempt to assimilate totems of invaders to pre-existing gods may perhaps be seen in the animal *vāhanas* of Hindu gods.
28. For accounts of six other sects contemporary with the Buddha, cf. the *Cūlasāropamasutta* of the *Majjhima-nikāya*; also the *Sāmaññaphalasaṃyutta*; the 63 sects of the *Brahmajālasutta* represent a much later account.
29. F. E. Pargiter: *The Purāṇa Text of the Dynasties of the Kali Age*, Oxford, 1913, p. 22, v. 16, Pargiter himself is puzzled by *rājānaḥ kṣatrabāndhavāḥ* which he mistranslates on p. 69 as 'kings with Kṣatriya kinsfolk'.
30. Yama and the three flood-avatāras are not the only such Indo-Mesopotamian affinities from literary sources. For example, *timiṅgila* and *timiṅgilagila*, where the reduplicated ending must originally have been *gala*. The earliest Asuras are, of course, to be understood as Assyrians. The *Jātakas* mention sailing to Babylon (Bāveru); on the other hand, the *Purāṇas* show an acquiantance with the sources of the Nile which surprised even their discoverer, Speke, but these documents were rewritten at a period much later than the one under discussion.
31. Cāṇakya is the most famous of Brāhmaṇa ministers. For the Kāṇvāyana kings, Pargiter, loc. cit., pp. 33–5, 71.
32. The seventh century emperor Harṣa was Buddhist enough to pardon one who attempted to assassinate him, and his drama *Nāgānanda* is Buddhistic; but he and members of his family also followed the cult of the goddess Gaurī.
33. D.R. Bhandarkar, *Indian Antiquary*, XL, 1911, 7–37. The passing-over even to a higher caste is sanctioned by *Manusmṛti* 10.64–5.

11

The Beginning of the Iron Age in India*

The problem here discussed is: When was iron first produced from natural ores in India, in quantity sufficient to be important in the means of production? This means primarily for agriculture. Iron was the cheap metal which made agriculture possible in monsoon jungles; bronze had always been reserved for the few, so that the bronze age was normally one of warriors who pastured cattle. Exceptions were the great river valleys passing through deserts, where no forest had to be cleared and the flood-deposited silt could be stirred up with a wooden plough or harrow: the Nile, Mesopotamia, the Indus. In contrast, the Gangetic basin with its very fertile alluvial soil but much greater rainfall was under dense forest till the iron age. The harrow would certainly not do where stones and roots were a serious problem; on the other hand, the forest could be cleared by fire only along the Himalayan foothills, where such obstructions would most commonly be expected in ploughing. One further essential difference between the Ganges area and the Punjab is that food-gathering was always much easier in the east, whereas pastoral life remained the norm in the Punjab nearly till Alexander's day.

The late Col. D.H. Gordon stated:[1] 'Once one gets down to (Indian) deposits that must date earlier than 400 BC, there is no iron and, furthermore, it would appear likely that at most sites the culture which continues to that date was one that utilized copper and stone'. The previous page of the same source reads: 'There was no iron with the invaders of India between 1800–1400 BC. . . . The Hittites kept the secret of the process (of smelting and forging iron) which would make iron a serious competitor with bronze . . . Not till 1200 BC (do we) get iron-working starting to spread all over western Asia, the Caucasus and eastern and central Europe. By 1100 BC iron was superseding bronze on the Iranian plateau and appears in graves in Luristan and at Necropole *B* at Sialk . . . By 800 BC there was a full iron age throughout eastern Europe and western Asia. Copper and bronze were no longer economic propositions and gave way to iron, articles of which were produced far more cheaply and in considerable quantity, making the possession of metal tools possible for those who had to content themselves with stone'. The writer, a competent archaeologist, implied that India remained inexplicably backward by not adopting the new metal.

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*_Journal of the Economic and Social History of the Orient_, vol. 6 (1963), pp. 309–18.

The reader might find my _Introduction to the Study of Indian History_ useful for the background references and discussion.

Sir Mortimer Wheeler takes the position that Indians learned the use and preparation of iron only from the Achaemenid conquest. He even states this as a fundamental postulate:[2] 'There is at present no clear evidence for the systematic use of iron anywhere in the (Indian) subcontinent before (the sixth century BC) unless sporadically in the northwestern region. Attempts to equip the Vedic Aryans in the middle of the second millennium BC, or their successors of the Brāhmaṇa period, with iron have no solid substance . . . The earliest unequivocal literary evidence for the use of iron by Indians are the well-known references by Herodotos and Ktesias (fifth century BC); and the earliest firm archaeological evidence for the normal use of iron within the subcontinent is provided by the First Taxila (Bhir Mound) for which Sir John Marshall's initial date of *c.* 500 BC is unlikely to be varied significantly. It is reasonable in the present state of knowledge to associate this developed use of iron with the imposition of Achaemenid suzerainty first upon Gandhāra and then upon the Indus region by Cyrus (558–530 BC) and/or Darius (521–485 BC), with the consequent quickening of trade and civic life in the north-west'.

Wheeler's fundamental contributions to India archaeology and especially his carefully worked out ceramic index would make his dating difficult to challenge, had it been positive in substance and based upon his own work over an extensive region. Unfortunately, the negative statements by Gordon and Wheeler would be credible only if Indian archaeology were reasonably complete—as it definitely is not. Marshall's date for Taxila I may turn out to be correct, but he normally relied upon pure divination unsullied by logic or facts so that I must excuse myself from taking it as evidence of anything. The dating in any case has not been arrived at by chemico-physical methods,[3] which are still not capable of giving error-free estimates though they remain the sole permissible criteria for absolute dating. Both Gordon and Wheeler (like all others before them) have taken Herodotos and Ktesias (known only at second hand) as reliable literary evidence; but nothing in Herodotos says that Achaemenid suzerainty extended east of the Indus. The main question would not be the quickening of civic life but the availability of local iron ores, without which there is no iron ore worth the mention in the Indus region or even the Punjab proper.[4] The best northern ores come from southeastern Bihar, a thousand miles from Achaemenid territory. The question has therefore to be discussed on the basis of all available literary evidence as collated with archaeology.

Ktesias indicates that two swords of superb quality, made of Indian steel, were presented to Artaxerxes Mnemon.[5] The process was simple enough, to judge from modern technique,[6] though it needed excellent ore and long practice. Steel of Indian origin remained famous in Europe as 'Damascus steel', till the last century. There is no reason to doubt that, even before 400 BC, India could export the finest steel of the day. But it must follow that Indian iron was produced in quantity long before that time, for the metallurgical technique needed to produce steel is well beyond that for iron. If, therefore, Gordon could not find iron before 400 BC in Indian excavations, it means simply that the archaeology of the subcontinent is far from satisfactory, and that most of the excavation has been at the wrong places for such discovery to be possible. Herodotos describes Indian levies[7] in the great army which Xerxes led in 482 BC to the conquest of Greece: 'The Indians wore cotton dresses, and carried bows of cane and arrows also of cane with iron at the points'. Though the implication of Herodotos's account is that every contingent was armed in its own traditional style with weapons of local manufacture, it could always be argued that the Indians were supplied with iron for their arrowheads by their Achaemenid commanders.

For the iron-ore country, however, we have one ancient record well worth consideration, the Pāli *Sutta-nipāta*.[8] The language is the most archaic of any work in the whole Buddhist canon; the style too is simple and direct. Aśoka mentions several of the *suttas* now found in this book (and nowhere else in the canon) with special approval in an edict addressed to the Buddhist Order. There is no question but that the work is pre-Aśokan and contains the oldest of Buddhist tradition. The fourth discourse in the collection is of 'Farmer Bharadvāja', (*Kasi-Bharadvāja-sutta*), a brahmin who farmed land at Dakkhiṇāgiri in Magadha. This is the portion of Mirzapore district along the southern bank of the Ganges.

The word *phāla* for plough-share occurs in both the prose and the metrical portions of the discourse. The simile runs: 'like a *phāla* heated for a whole day and plunged suddenly into water . . .'. Bronze treated like this would become brittle and useless, apart from being much too costly for ploughshares. Iron reduced from ores by any primitive method comes out as a spongy mass which has to be heated and forged repeatedly as well as hardened by sudden chilling before it is of any use for tools. The death of the Buddha is dated at either 543 BC or 483 BC. The sermon is undated, but its context shows that the Buddha had not reached the height of his reputation in Magadha, being then comparatively unknown. It follows, even on the latest possible dating for the Buddha's decease, that agriculture and the iron plough-share were in general use in Bihar before 500 BC. The particular region of the *sutta* still has good supplies of an important and rich iron ore, haematite.

The far-fetched Achaemenid theory, which would not be worth discussing without the weight of Wheeler's archaeological experience behind it, can be dismissed without difficulty. A famous incident of the Buddha's life is his 'First Meditation'.[9] The Buddha-to-be, while yet a small child, was left in the shade of a convenient tree while all the Śākyans including his father were engaged in ploughing. There is no reason to doubt the antiquity of the tradition, for the episode proved rather embarrassing to later Buddhists and had to be embellished by coating the ploughs with precious metals. That the Buddha's father, a kṣatriya and supposedly a king, could set his hand to the plough like any common peasant would not be an invention of later date. The Śākyan territory runs along the Nepal border of Gorakhpur and Basti districts in U.P. The land may be cleared by fire, like the whole chain of (foothill) settlements from Hastināpura to Champaran district and hence south to Rajgir; but it cannot be settled permanently without the iron ploughshare. Tradition, Chinese pilgrims' accounts, and archaeology (as well as the Aśokan column at Rummindei) prove that the settlements did exist early in the sixth century, and probably in the seventh century BC. Their existence without iron seems incredible. For that matter, the early settlement of Banaras and Rājgir can only be credited to the proximity of iron ores south of the river. Last of all, it does not seem possible to develop the Magadhan philosophies (Buddhism, Jainism, that of the Ājīvikas & c) in a pastoral context. Only agriculture would call forth such new religious ideas; but I shall not expand this here. It may be pointed out, however, that none of those settlements of the Gangetic 'chain', which joined on to the famous *uttarāpatha* trade route, have an Indus stratum. All of them have to be called 'Aryan', for lack of a better term.

What of earlier, unmistakable references to iron in India? Let it be agreed that *Ṛgvedic* references to *ayas* need not mean iron, as bronze could be indicated. The plough-deities *śunā-sīrau* occur in a special *Ṛgvedic hymn*;[10] but the plough-share need not have been of iron. The case is otherwise for the *Yajurveda* where both the Black and the White recensions agree in mentioning agriculture with the plough and iron, both unequivocally, in spite of Wheeler's doubts, though the iron share may still be questioned as we shall see. In Keith's translation[11] the prayer runs: 'May for me . . . milk, sap, clarified butter, honey, eating and drinking at the common table (*sagdhiḥ* and *sapīti*), ploughing, rains, conquest, victory, wealth, riches, prosperity . . . low-grade grain (*kuyava*), food, freedom from hunger, rice, barley, beans, sesame, kidney-beans, vetches, wheat, lentils, millet, *Panicum miliaceum, Panicum frumentaceum* and wild rice (prosper through the sacrifice). May for me the stone, clay, hills, mountains, sand, trees, gold, bronze, lead, tin, iron, copper, fire, water, roots, plants, what grows on unploughed land, what grows on ploughed land, tame and wild cattle prosper through the sacrifice'. As for the *Brāhmaṇa* literature, it is much more difficult to get the information in such concentrated form out of the diffuse ritualistic works; but an excellent modern summary[12] exists which confirms the *Yajurveda*, in spite of what Gordon and Wheeler have said. The existence of iron is not in doubt. Rau doubts the use of iron or any metal for ploughshares, while noting that drinking vessels, daggers, needles, razors, nail-trimmers, and mirrors were being made. All of these articles would be much better in bronze than in the soft iron then available; most of them could only have been of bronze. Moreover, the use of iron for jewellery is not known, nor indeed plausible; it would then follow that iron was known, worked, prayed for, but not used for anything at all. At least, this is the ridiculous position one gets by agreeing with this author that the plough being tipped with metal is 'zweifelhaft'. Rau adds: 'Noch weniger glaublich aber erscheint die Bespannung mit sechs, acht, zwölf oder sogar vierundzwanzig Zugochsen'. There is no doubt of twelve-ox teams being used, as they still are, for ploughing heavy soils with the heavy plough; I can furnish the actual photographs. So Rau's doubts stem from ignorance of Indian farming technique, as the archaeologists' from unwillingness to study the admittedly rather difficult and boring literary works.

There remains the question of date. Keith, never the man to date Indian books too early, takes the *Yajurveda* as closed between 800–700 BC and in another place as 'before 600 BC'[13]. This seems reasonable to me, even though I doubt his statement that the Upaniṣads precede the Buddha; some Upaniṣads may do so, but certainly not all the major ones. Rau[14] begins the tenth section of his valuable analysis by suggesting that the Aryan tribes must have started from the Punjab homelands about the first quarter of the first millennium BC during which quarter they reached the eastern ocean. This seems rather likely too, though again the archaeologists may wish to argue the point. But let us restrict the discussion to the literary evidence. There were Aryans outside India, while even to the admirable Herodotos, not all Indians were Aryans. In the very same passage that describes the army of Xerxes, the Greek 'Father of history' tells us that 'the Medes were anciently called Arians by all people' and again that 'the Arians carried Median bows, but in all other respects were equipped like Bactrians'. Since, besides Indians, he also mentions the Gandarians (Gandhāra tribe) and the Pactyans (the Paktha of the 'Ten Kings' battle, *Ṛgveda* 7.18.7), the Aryans as a particular tribe seem to have preserved their entity. Indeed, Darius calls himself not only an Achaemenid and a Persian, but 'an Aryan of Aryan descent', implying that the Persians were a section of the Aryans in general; but Strabo reports Aryans settled on the Indus even in Alexander's time. The Hittites, whose early knowledge of iron has been noticed and admitted, spoke an Aryan language; some of their seals of about the beginning of the first millennium show the Indian hump-backed bull and a naked goddess who fits the description of *Ṛgvedic* Uṣas. Mitannian texts (Boghaz Köï) indicate people, probably Medians, near lake Urmiyeh worshipping Indra, Varuṇa, Mitra, the Nāsatyas—all *Ṛgvedic* gods. A fairly late stratum in the *Ṛgveda*—and such documents can be stratified by experts as neatly as a dig by good archaeologists—shows old-Persian names:[15] Suśravas (and the adjective *turaṇyu*), Iṣṭāśva, Iṣṭaraśmi. The Indus region is known to the Avesta as one of the regular Aryan localities. Surely, this means that contact between various branches of the Aryans was not resumed only with the Achaemenids, but continued more or less uninterrupted from the first invasion early in the second millennium[16] BC. If so, there is no reason to believe that all knowledge of iron and iron-working was carefully excluded from the confines of India before the Achaemenids.

Remembering that food gathering was so easy that less metal was needed, the date 800–700 BC, therefore, seems to me a reasonable beginning for the iron age in India, meaning thereby specifically the Gangetic basin where iron was most needed and most likely to have been worked. Wheeler puts the Northern Black Polished Ware at about 500 BC, which need not be challenged; but his saying that its origin was contemporaneous with that of iron and of punch-marked coins—a specifically Indian type of coinage to a weight standard that is Indian but not Iranian—seems to me unjustified. Taking the Paila hoard as Kosalan[17], the last coins must have been struck before 480 BC, while the number of different kings (of at least two distinct dynasties), would take the beginning of the coinage series back into the seventh century BC, after iron and before the Northern Black Polished Ware.

NOTES

1. D.H. Gordon: *The Pre-historic Background of Indian Culture* (Bombay 1958), pp. 154–5.
2. Mortimer Wheeler: *Chārsadda: A Metropolis of the North-west Frontier*, (Oxford University Press, 1962; for the British Academy and the Government of Pakistan); pp. 33–4. The same position was taken earlier in Wheeler's *Early India & Pakistan to Ashoka* (London, 1959), where he puts the Gangetic copper hoards 'at a guess' before the eighth century BC, but fails to see iron before the Achaemenids. Incidentally, the existence of two Gandhāras, on both sides of the river, must be noted.
3. The most publicized such method is by radiocarbon, which normally is too expensive for more than a single run and thus avoids answering questions about errors of estimation caused by counter variation, counter fatigue, & c, not to speak of poor statistical methods employed. Geomagnetic measurements and flourine content used to supplement C-14 at the same site would be useful, but they are never done in conjunction. I am told that Pandu Rajar Dhibi in West Bengal shows iron in a VIth century context, but again the findings might be questioned on archaeological grounds, like reports of still earlier iron at Kosambi.
4. At least, Herodotos and Ktesias do not specify any, nor are iron articles included in the tribute-list of Darius's satrapy on the Indus. Strabo and other classical writers noted (after Alexander's companions) that Indians of the Punjab were singularly poor metallurgists and did not know how to exploit any ore in the local hills; but no specific mention is made of iron ore even then.
5. According to Plutarch's *Life* of Artaxerxes, Mnemon was Artaxerxes II. It was against this Mnemon that Xenophon marched with the Ten Thousand, and it was at his court that Ktesias was physician. But J.B. Bury's *History of Greece* (Modern Library edition, New York 1937) makes matters worse by taking (in the index) Artaxerxes II as Longimanus (who, according to Plutarch, was Artaxerxes I). Bury's slip would put Indian steel fifty years earlier. I follow Plutarch, who is undoubtedly correct here.
6. Lewis Rice: *Mysore: A Gazetteer compiled for Government*, vol. I (London, 1897), revised ed., pp. 531–3. But the pieces obtained were each of about 75 grams weight and of highly variable quality, though on the whole so good that

the British steel-makers expected such Indian steel to become of importance even at the end of the nineteenth century.

7. Herodotos, Book vii; both the Rawlinson translation and that of Aubrey de Selincourt for Penguin classics agree in substance. But Indians here mean the tribes on the Indus or to the west. Darius's own list of conquests and provinces reads Kambujiya, Gandāra, Hinduš, in that order and would indicate western Afghanistan, Kandahār, and the area along the west bank of the Indus respectively.
8. There is no essential difference here in any of the printed texts, of which two editions for the Pāli Text Society are standard. I have followed the text as printed by P.V. Bapat to accompany my father's Marāṭhī translation (Dharmānanda Smārak Sāhitya, no. 4, Poona 1955).
9. The best narrative is in the introduction (*nidāna*) to the Pāli Jātakas; the text used is *The Jātakam*, ed. V. Fausböll, London 1877, vol. I, p. 57. The motif is famous in Buddhist art; the ploughman in Kusāṇa reliefs is generally shown as a plebeian, stripped down for the work.
10. The hymn is *RV*. iv.57. The furrow *sītā* and the verb-form *kṛṣatu* show clearly that ploughing and not hoeing is meant, though the harrow is admissible. Sāyaṇa's comment on the eighth and final *ṛk* runs: *phālāḥ-bhūmi-vidāraka-kāṣṭhāḥ*, so that a plough or harrow completely of wood, without even an iron tip or share, is possible. Apparently, Sāyaṇa took it as such, and the brahminical injunction of *Manusmṛti* x.84 against using wooden implements with iron points to dig the earth might be the basis of this particular comment.
11. A.B. Keith, trans: *The Veda of the Black Yajus School/entitled/Taittirīya Saṃhitā*, Harvard Oriental series vols 18–19, (Cambridge Mass., 1914). The mantras translated are iv.7.4–5, on p. 381 (vol. 19). I have made two changes in the translation, namely for *kuyava*, which can only mean edible weed-grain which grows with the cultivated grain and is difficult to separate and indeed rarely separated in the simpler type of agriculture. Secondly 'eating and drinking in company', which is what Keith would make of *sagdhiḥ* and *sapīti* throws away an important point of information. Company may be a matter of choice, but the prayer, being in common for the whole clan, must indicate a particular type of obligatory commensality, like the common table at Sparta and Crete in Aristotle's day, and the later Indian *jāti-bhojana*. The evidence for this interpretation lies in the *eka-pātraṃ* of tribes described in the 11th Book of the *Arthaśāstra*, and forms an important link between the *Arthaśāstra* and older tradition. Other such links are the words *sajāta*, *rāṣṭra*, and *aparuddha*.
12. Wilhelm Rau: *Staat und Gesellschaft im Alten Indien nach den Brāhmaṇa-Texten dargestellt* (Wiesbaden, 1957). Sections 18 and 19 (pp. 25–8) are the most important for our purpose. The dating at the first quarter of the 1st millennium BC is given on p. 13, without argument. For the ploughing with 12 oxen. *TS*. v.5, Keith above p. 408. I have often seen such teams in use near Sirval, 34 miles south of Poona; the heavy plough and the 12-ox team alone enable the famous black soil of the region to be cultivated satisfactorily. The team needs considerable training, but the purpose is not ceremonial by any means, as Rau would have it.

13. See note 3.
14. Keith above in his introduction, p. xli says: 'This would give a later limit of about 600 BC for the Saṃhitā on the ground of the evidence of the technical literature'. In the *Religion & Philosophy of the Veda*, also published for the Harvard Oriental Series (vols 31–2) in 1925, Keith was more explicit (p. 20): '. . . a lower limit of about 600 BC for the latest Brāhmaṇas is obtained, from which may be deduced a date of about 800–700 BC for the Saṃhitās as a lower limit. The same conclusion is indicated by the facts of language . . .'. Of course, the only absolute dating possible for early documents is from astronomical data precisely and unambiguously stated, which generally means an eclipse or a conjunction. None such are known for the Vedas, but the same reproach holds for Ktesias and Herodotos, so far as I can see.
15. 'Kinless' Suśravas of *RV*. i.53.9 & 10 is undoubtedly Kavi Husravah of the Avesta. Iṣṭāśva should be Viśtāspa (not the Achaemenid, surely) and Iṣṭaraśmi is equivalent to Arasmes in Greek; both are given as kings in *RV*. i.123.13. However that Veda is taken as closed before 1200 BC though the first book and the tenth may contain later additions.
16. The interruption of references to Meluḫḫa in Mesopotamian records may be put at about 1750 BC, and the place is generally identified with the Indus region. The basic texts are reviewed by A.L. Oppenheim in *JAOS*. 74. 1954. 6–17, and I take Meluḫḫa as the Indus valley with Ṭilmun as Bahrein, following W.F. Albright's review of the same texts (and article) in the *BASOR*, though so eminent an authority as S.N. Kramer would place Ṭilmun at Harappa.
17. *JBBRAS*. 27. 1952. 261–71; the list shows at least nine different kings, and we know that the last Kosalan monarch, Viḍūḍabha, did not long survive the Buddha. Also it is certain that his father Pasenadi ruled for a very long time, being crowned while still young and dying at the age of eighty, just before the Buddha. Of course, the identification of the particular coinage as Kosalan is conjectural, but the find-spot is certainly in ancient Kosala, the coins are not Magadhan in fabric or standard, nor Achaemenid. The Indian standard was generally of Indus weight-class *D*, approximately 3.5 grams corresponding to 32 *raktikā* (seeds of the *Abrus precatorius*). The Paila hoard is on the 24 *raktikā* standard. The North-west frontier coins were approximately 100 *raktikās* in weight, close to the modern rupee. The Paila Hoard cannot have been punched after the Magadhan conquest of about 480 BC.

12

Ancient Kosala and Magadha*

The coins of the Paila Hoard (which are grouped in chronological order in another paper)[†] belong in all probability to ancient Kosala, and to a period ending in the fifth century BC. The ultimate problem is to identify the groups with kings whose names survive in the scanty and conflicting literary records, for the marks on the coins are heraldic, not epigraphs. No manual of heraldry is known that covers these, nor have any inscriptions been discovered for the locality and period. Most of the archaeological work has concentrated upon the Buddhist construction that covers the best-known sites, without troubling to discover what lies below. There exists no connected document which could be glorified with the title of a chronicle, annals, or history. For all these reasons, it is not only necessary to set down our hypotheses, but to outline the historical background. This sketch will be found to differ from those of books most commonly accepted as authoritative.[1] The relative chronology of our coin-groups remains independent of the historical reconstruction.

The essential features have usually been missed altogether, in the traditional manner of foreign historians when faced with the comparatively meagre, unreliable, 'historical' data that can be gleaned from Indian documents. The principal characteristic of the times is a great social ferment which ended with the stabilization of a new society. The underlying historical processes manifest themselves in two different aspects, religious and imperial. The first led to the spread of Buddhism over the entire subcontinent; the second also culminated with Aśoka, in the Magadhan conquest of India.

1. *Free Aryan Tribes*

These two aspects of the superstructure cannot be treated as curious accidents unconnected except by the chance conversion of Aśoka to Buddhism. The canon compares the Buddha again and again to a *cakravartin*.

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[†] [See D.D. Kosambi, *Indian Numismatics*, Hyderabad, 1981.]

The two great non-violent religions, with their basic idea of ahiṃsā, arise in UP at the same time as the beginning of Magadhan expansion. The Buddha and Mahāvīra are not only contemporaries but close in geographical situation. Their religions differ by very little—in spite of bitter theological controversies and polemics—in philosophy or in the organization of their monastic orders. Both these teachers made their own contributions as the culmination of various systems proposed by a long line of ascetic predecessors. Finally, both are *kṣatriyas* of one particular type, namely men belonging to clans that are proud of their Aryan[2] descent without following the highly Brahminized Vedic ritual. The clans are free oligarchies where the power vests in the general assembly of all members. This has left its mark upon the Buddhist monastic order, which is called by the same name as that for such a tribe, *saṃgha*. The initiate becomes a 'son of the Sakyans', and must behave nobly. The tribe of the Licchavis, in which Mahāvīra was born, undoubtedly preserved this assembly, the *sabhā*. The constitution of the Buddhist Saṃgha clearly preserves the old tribal constitution as adapted to monastic purposes. We know that the voting was by sense of the meeting, not a counted majority; the decisions were carried out by the elders of the various families; the king was one of these senior oligarchs, usually elected in rotation[3] but without any of the absolute power that characterizes, in theory, the later Indian monarch. There is a great difference between the tribal oligarch *rājan* and the absolute *mahārāja*. Buddha shows his high admiration for the Licchavis again and again; they differed from his own tribe, the Sakyans, only in their greater military strength, acknowledging no overlord, and having greater power over the surrounding population; the Sakyans still put their hands to the plough (*Jat*, Nidāna).

The tribes could and did produce such great ascetic leaders for two main reasons. First, that they had not been penetrated by Brahminism though of ancient 'Aryan' lineage, and secondly that the free democratic tribes were themselves breaking up. The first point is a natural consequence of the fact that the ancient Vedic religion and ritual placed enormous importance upon the sacrifice which had become progressively so complicated as to require the services of professional priests, and was of use only to powerful and aggressive kings. The tribal householders performed their own simpler ritual. Brahmins as such received no respect from the Sakyans (*DN.* 3). The Buddhist saṃgha is firmly against all ritual (*saṃkhārā*). The point is also proved by the low positions that later Brahminical works assign to such tribesmen, namely that of mixed castes. For example, the *Manusmṛti* 10.22 derives the Mallas and the Licchavis[4] from mixed *kṣatriya* and *vrātya* descent, the vrātya being defined two stanzas earlier (and in 2.39) as he who had not gone through the Brahminical initiation ceremony to which he was entitled—which meant that be belonged by birth to the Aryans. We know independently that the Licchavis, also called Vajjis (= *vrajins*, nomads) can be equated to these vrātyas. The *Atharvaveda* xv makes a desperate but unsuccessful attempt to capture the vrātya ceremonial. Finally, the Licchavis were certainly not of low birth, for a marriage alliance with them was sought by powerful kings of dubious lineage as a method of ennobling themselves. The best known case is that of the Gupta kings; the termination—*gupta* is to be used only by vaiśyas according to orthodox rules. But the founder Candragupta I married the Licchavi princess Kumāradevī, struck coins in their joint names and with their joint images, though the *Bhagavad-gītā* shudders at the idea of miscegenation. The son and successor Samudragupta carefully proclaims himself son of a daughter of the Licchavis. Yet the actual royalty cannot be derived from the Licchavis, who ceased to be of any political or military importance about eight hundred years earlier. The alliance is clearly patent of nobility, for the Purāṇas in mentioning the first Guptas as local rulers in the Gangetic basin (*DKA*. 53, 73) call them, along with others, 'niggards in graciousness, untruthful, very irascible, and unrighteous', though we get an entirely different picture from the great Sanskrit literature of the Gupta period at its best. This ascent, however, began long before the Guptas, and at a time when the Licchavis could be dangerous enemies. Bimbisāra, king of Magadha and special friend of the Buddha, had a Licchavi girl named Cellanā[5] among his queens.

That the Malla Bandhula and his nephew Kārāyaṇa were in Pasenadi's service (*DhA*. 4.3) though the Mallians did not acknowledge any suzerain, indicates, as surely as the fact of many such tribesmen becoming monks, that the tribal life and system no longer gave satisfaction to its ablest members. Later feudal developments are foreshadowed by the absolute monarch granting whole villages to his priests or officials. Pāyāsī, called a *rājanya* (*DN*. 23), holds a village by grant of Pasenadi, not by force of his own arms nor conquest by his tribe; of course there is no question of the consent of the villagers.

The 'Aryanization' of some aboriginals like the Mātaṅgas while others of the same tribe remained as they were and sank to the status of a very low caste is demonstrable. The *Mahābhārata* grudgingly recognizes such wild tribes as kṣatriyas, degraded by the wrath of Brahmins (*Mbh*. 13.35 Vulgate). In particular *Mbh*. 12.297 (Vulgate) mentions 'The kṣatriyas called Atirathas . . .Śvapākas, Pukkasas, Niṣādas . . .Caṇḍālas' as sprung from the original four castes by intermixture. These are clearly aborigines whose survivors in developed localities retain their primitive ways and rites, hence are abhorred. For example, the Caṇḍālas, whose inclusion in the above list of fallen Kṣatriyas is notable, lived in their own special villages apart from all others,[6] had their own language; (*Jat.* 498) though Brahmin girls washed out their eyes when defiled by sight of a Caṇḍāla, some of the cleverer ones could manage to secure the necessary education at a distant centre like Taxila, and ultimately pass themselves off as members of a higher caste, even Brahmins! Perhaps the best case is that of the Koliyas, against whom their neighbouring Sakyans fight by methods forbidden in traditional Aryan warfare, e.g. poisoning the water, reminiscent of some American tactics against the Apaches. Yet the Koliyans claimed and received a share of the Buddha's ashes; verses at the end of *DN.* 16 identify them as the *Nāgas* of Rāmapura, clearly pre-Aryans[7] on the frontier of the developed region. Later, the Mahāvastu (355) assigns them respectable ancestors, the sage Kola of Benares and Sakyan mothers. Then we find Nāga kings in the south (*DKA.* 49, 53) while aboriginal Nāgas still exist in the forests of Assam. This is what is meant by progressive Aryanization. It is one of several processes going on simultaneously, along with decay of the older Aryan tribes, rise of autocracies, of new religions, and greater volume of trade.

The process continues in the same marginal regions, to the present day in a different guise, namely a primitive aspect of the class struggle. The *Census Of India*, 1921, vol. v, pt 1, pp. 347–8 gives lists of castes that were then trying to advance themselves groupwise in the social scale, while those already so advanced denied their claims. Many of the 'castes' in the list are occupational, developed from tribes; remnants of tribal assemblies appear now as caste *sabhās* (p. 346). But registration as a higher caste by the census has an *economic basis* which does not appear there, being more clearly seen in the standard method: the hiring of Brahmin priests by the 'caste' or by a section thereof as soon as a certain amount of money has been acquired. This generally means revision of ritual, often rewriting of the tradition by assimilation to some legend in the purāṇas or *Mahābhārata*, and changes in dress. The Census volume (chap. xi) has discussed (without realizing the implications!) Europeans, Anglo-Indians, Christians also under caste (p. 368), showing a parallel process: individuals of the latter two trying to upgrade themselves by one stage, just as in the USA, individuals having a negro ancestor try very often to conceal the fact if physiognomy permits. This is clearly a *class* phenomenon, for social and ultimately economic advantage, not one of what is strictly speaking immutable caste. Hence it is obvious that the origins of caste also lie, at a more primitive level, in the means and relations of production; that the institution survives only as long as it is not incompatible with the form of property. There is no question but that the 'higher' castes were and are, on the whole, economically better off; where they are not, or have not greater opportunity, we find an absence of caste tension while no attempts are made at 'passing over'. Similarly for the 'Aryanization' in the early period, which was obviously due to the superiority of 'Aryans' in war and in the struggle against nature; this meant that not only their tools and weapons, but also their forms of property, ritual, social institutions, and (more slowly) the language (cf. *Census*, p. 296) were adopted; it seems clear that the Brahmin caste played a very similar role in this older process also.

2. *Absolute Monarchs*

The most powerful king of Buddha's day was Pasenadi, king of Kosala whose capital at Sāvatthī (skt. Śrāvastī) is now represented by the ruins of the double village Saheth-Maheth on the frontier of Bahraich and Gonda districts. This king also desired a marriage alliance with a tribe, the Sakyans. The reason given is his veneration for the most famous Sakyan, the Buddha. But actually, the respect the Sakyans enjoyed apart from their connection with the Buddha was the main cause. The demand for a maiden who would be Pasenadi's chief queen was, surprisingly enough at first sight, highly embarrassing to the Sakyans. Two different views are reported of them on this occasion; 'We live under the suzerainty of the king of Kosala. If we do not give him one of our daughters, great enmity will arise thereby; but if we do give him one, the traditions of our clan will be destroyed thereby. What is to be done?' (*Jat.* 465). 'The king is an enemy of ours. Therefore, if we refuse to give him what he demands, he will destroy us. Moreover, he is not of equal birth with ourselves. What is to be done?' (*DHA.* 4.3).

Both of these are substantially correct. Pasenadi's suzerainty over the Sakyans is elsewhere attested (*DN.* 27). The low birth of Pasenadi is confirmed by his marrying Mallikā, flower vendor and daughter of a flower-gardener, (*Jat.* 415) who became his chief queen. The *Lalita vistara* 3, in reviewing objections to all the royal families in which the Buddha could have taken birth reports *kauśalakulaṃ mātaṅgacyuty-upapannaṃ, na mātṛ-pitṛ-śuddhaṃ hinā-dhimuktikaṃ na kuloditam* . . . The interesting phrase is *mātaṅga-cyuty-upapannam*, descended from the Mātaṅgas. The word, according to Chinese and Tibetan translators, means a low and savage tribe, apparently our present Māṅga; mātaṅga can also mean an elephant, (like *nāga*, which again means cobra, noble, and demon), presumably a totem. But that Pasenadi was low-born is clear. The Sakyan solution of the problem itself proves this. They cheat him by offering the beautiful Vāsabha-Khattiyā, daughter of Mahānāma Śākya, by a slave woman Nāgamuṇḍā; the mother's name combines the names of two well-known savage tribes. Pasenadi is deceived successfully about the girl's birth, and makes her his chief queen for a while. The insult is later discovered but forgiven by Pasenadi on the Buddha's intercession. The son of the union, however, succeeds in wiping out the Sakyans as a measure of revenge.

The royal houses of Kosala and Magadha had intermarried. Bimbisāra and Pasenadi had each taken the other's sister in marriage; after a certain amount of fighting with his own nephew, Pasenadi cemented the truce by giving his daughter Vajirā to Ajātaśatru. Incidentally, this extremely close relationship would not be admissible under current Brahminical rules. It follows that both royal houses were on the same low level of descent. The purāṇas call these Magadhan kings, *kṣatrabāndhavāḥ* (*DKA*. 22); the malevolence and spite of the termination *bandhu* is brought out by the *Chāndogya Upaniṣad* 5.3.5, where a discomfited Brahmin calls the more learned kṣatriya *rājanyabandhu*. For that matter, Magadhan Brahmins who took part in vrātya rituals and were otherwise lax are called *brahmabandhu*. Now Prasenajit is assigned high lineage by just one source, among the Ikṣvākus in the Purāṇas (*DKA*. 11); this can only be by confusion with another Prasenajit of Kosala before the Kali age (Pargiter 145, 150). The Purāṇa list is obviously garbled in its attempts to report all Ikṣvākus, whence just before Prasenajit we find Śākya, Suddhodana, Siddhārtha, Rāhula. The reason is that the Sakyans claimed descent from Ikṣvāku as did the older and perhaps mythical Prasenajit. The Purāṇic list ends with Sumitra, the last of the Ikṣvākus according to an ancient traditional śloka (*DKA*. 12)—in spite of the much later southern Ikṣvākus (*DKA*. 49). But this Sumitra, in the more accurate Buddhist records, was the last king of Videha, with capital at Mithilā (*Lalita vistara* 3), and had no successor, the line having ended with him. Pasenadi never claims to be an Ikṣvāku like the Buddha, but only a Kṣatriya and a Kosalan like him as well as of the same age (*MN*. 89).

The point is of considerable importance, for the genealogy shows that the kings were of a type foreign to the previous traditional ruler, the elective or hereditary tribal king who was accompanied in battle by all the able-bodied men of the tribe. There the king had to be a member of the tribe, whether by birth or adoption, and his powers were limited by the assembly. His army was the armed tribe as a whole. But such are not the kings of Magadha or Kosala as we see them. The Kosalans no longer function as a tribe, if indeed a Kosala tribe still existed at the time. The king rules over subjects, the vast majority of whom do not belong to his tribe, nor perhaps to any tribe at all. The Magadhans were also a tribe, but the same is true of the Magadhan kings from Bimbisāra; Magadhan later means trader (*Manusmṛti* 10.47), so that either the first traders in the region where the *Manusmṛti* was written came from Magadha, or the remnants of the tribe had developed into a guild; the two are not mutually exclusive. The *Arthaśāstra* Magadhan appears both as bard (*A*. 3.6, 7; 5.7; 10.3) and a mixed caste. Malla survives only in the meaning of wrestler, like Pehlawan in Persian. One main reason for this collapse of old institutions was the development of private as against tribal property, following conquest over aboriginal populations and the development of the tribe into an oligarchy. The process was not confined to the Kosala and Magadha tribes. Thus we find the Sakyans and certainly the Licchavis in the oligarchic stage, living by the labour of others. The Licchavis are not only individually rich, but collect tolls, have spread into Videha and Kosala where, with the Mallas, they made a confederacy of eighteen clans which was the strongest power to oppose the kingdom of Magadha. Their expansion is not pioneering[8] in a virgin wilderness but conquest of settled territory which had its own rulers before them. Keeping the Licchavi tribe pure and exclusive meant conquest and exploitation, the development of a tribal democracy into a tribal oligarchy. It therefore meant slackening of tribal bonds. Both would naturally lead the more sensitive members like the Buddha and Mahāvīra to turn to the contemplative life. It was by completing this decline and dissolution of the tribal constitution through his intriguing minister Vassakāra that Ajātaśatru succeeded in conquering the Licchavis. The intrigue is supposed to have taken only three years, but the decay must have begun much earlier, to be accelerated by the gain in personal wealth among the Licchavis. Viewed on a larger scale, this was the inevitable consummation of Aryan conquest, of the development of helotage as the Śūdra caste, exploited by an armed body of warriors which had become the Kṣatriya caste and begun to exploit other Aryans too, starting with the vaiśyas.

There are two concomitants of this new monarchical system. The internal is characterized by a standing army and permanent officials without tribal bonds, owing allegiance to the king alone; and of course the kings being of uncertain birth, neither supported nor controlled by tribal custom, show a remarkable tendency to usurpation. The external development is conquest, in particular the great efforts made to suppress what was left of the free tribes.

The king has now a special office, that of army commander *senāpati*. Bimbisāra is called *seṇiya*[9] in Jain records and offers command of his army to the Buddha. Pasenadi has the Malla Bandhula as minister and perhaps army commander. Pasenadi's son Viḍūḍabha had the title *senāpati* in his father's lifetime. Pasenadi had Bandhula killed by treachery, suspecting him of ambition beyond his station. The fear was not unjustified because later Viḍūḍabha usurped the throne, being invested with the regalia by Bandhula's nephew, the minister Dīgha-kārāyaṇa ('long' Kārāyaṇa; possibly the Dīrgha Cārāyaṇa of *A.* 5.4), when Pasenadi had gone on a final visit to the Buddha (*MN.* 89 *aṭṭh*, *DhA.* 4.3, *Jat.* 465). Pasenadi himself had been crowned just after completing his studies by his own father (*DhA.* 4.3) king Mahākosala. Bimbisāra was placed upon the throne at the age of fifteen by his father (*Mahāvaṃso* 2.28). But abdication did not save Bimbisāra, who was imprisoned and finally murdered by his son Ajātaśatru. The pattern is thus well-established. The state as a mechanism of violence unconnected with and therefore hostile to tribal power has come into being, and its control could be acquired by violence. Purity of descent or legitimacy are of minor importance. One of Bimbisāra's queens was the beautiful courtesan Padumāvati miraculously brought from Avanti to be the *nagarasobhinī* of Rājagṛha. Mahāpadma Nanda, the last great king before the Mauryans, is reported to have been the son of king Nandin by a Śūdra woman (*DKA.* 25).

3. *Conflict with the Saṃghas*

One remarkable external consequence of this new state is the extermination of free *saṃgha* organizations. The purāṇas are impressed by Mahāpadma's complete annihilation of all kṣatriyas, like a second Paraśurāma (*DKA.* 25); but the context makes it quite clear that he destroyed only those kṣatriyas who lived in tribal units. The names are given: Ikṣvākus, Pañcālas, Kāśeyas, Haihayas, Kaliṅgas, Aśmakas, Kuravas, Mithilas, Śūrasenas, Vītihotras. Of these, the royal Ikṣvākus were already extinct, as also the kings of Mithilā. A Kuru king is mentioned in the *Raṭṭhapāla sutta* (*MN.* 82; Kuru territory in *DhA.* 2.14–15), but again the context shows that we have to do with a petty tribal king. The tradition seems to connect an extermination of *tribal* kṣatriyas with the ending of certain ancient tribal king-lists. Mahāpadma's action is founded upon good precedent, and the whole process emphatically set out for Indian kings by the *Arthaśāstra*, book XI, (section 160–1), which is dedicated to handling *saṃghas*. 'The acquisition of a *saṃgha* is better than that of any army (*daṇḍa*) or an ally. Saṃghas are invincible by others because of their unity (or organization *saṃhatatvāt*). Those favourably disposed should be conciliated by gifts; those opposed, destroyed by sowing dissension. In Kamboja, Surāṣtra the kṣatriya groups live by husbandry and weapons. The Licchavis, Vrajikas, Mallakas, Kukuras, Kurus, Pañcālas and the like live only by title of kings.' The book goes on to give details of the political technique whereby the *saṃgha* organization may be weakened. The importance of this section seems to have been missed by our historians. It shows first of all the existence—whether actual or traditional at the time of writings does not matter—of certain saṃghas, whose names we have met elsewhere. It also states explicitly (I follow the text and commentary of T. Ganapati Sastri, not R. Shamasastry's translation) that such saṃghas were generally too strong to be destroyed by military action. This is fairly well confirmed by Alexander's campaign in the Punjab, where the stiffest opposition came from such tribal organizations; the Pūrus still existed, for king Poros had a nephew also called Poros, whence both should be Pauravas in the old tradition whereby the king is called by the tribal name. We also hear of the Malloi, identified with the later Mālava though the lack of the extra syllable should make them a branch of the Mallas; and the Oxydrakai, presumably *kṣudrakas*. The *Arthaśāstra* does not overestimate the formidable power of such *saṃghas* in resisting direct assault. So a technique of promoting internal discord is carefully set out, being exactly the same as that practised by Ajātaśatru and his minister Vassakāra[10] against the Licchavis. Ajātaśatru completed his conquest by force of arms. The Licchavis survived for nearly a thousand years thereafter, down to the Gupta period but *not as a saṃgha* with independent military power, obeying none but their own assembly. Again this is not an isolated example. Viḍūḍabha attacks the Sakyans, without first sowing discord, supposedly to wipe out the insult of his own birth. But though the action is represented as a revengeful massacre, Sakyans did survive (*DhA*. 4.3); kings from places as distant as Ceylon are said to have married Sakyan brides (*GAI* 607). Clearly, they did not survive as a self-governing tribe; the Kosalan king, though their nominal overlord, must have feared their tribal existence and semi-independence. The parallel here is a bit too close, for the Jain sources have Ajātaśatru's grandfather, the Licchavi (Haihaya) Ceḍaga, drowning himself as does Viḍūḍabha's grandfather Mahānāma. Thus the kings ruined by direct attack those tribes whose institutions still retained a dangerous measure of democracy combined with military power. This put the finishing touches upon the process of decay and dissolution which we have already pointed out as affecting all tribes of the sort in U.P. at least.

4. *Conflict between Kingdoms*

Aggression did not stop with destruction of the tribes, but extended also to other kingdoms. Aṅga had already been absorbed by its western neighbour Magadha, apparently at the time of Bimbisāra. Kāśī fell to Kosala some generations before the Buddha, for the name is joint, Kāśī-Kosala, as is Aṅga-Magadha. There are many scattered references to fighting between Kāśī and Kosala long before Pasenadi (*Jat.* 51, 100, 156, 336, 355, 428, 371, 532). The really interesting conflict, however, is the struggle between Kosala and Magadha, which was inevitable, granted the tendency of the times to powerful, central, absolute monarchies. Kosala is by far the greater kingdom, extending from the lower Nepal to the Ganges. But, as we shall see, Magadha is in many ways strategically better placed. During Pasenadi's lifetime, the conflict is inconclusive (*Jat.* 239, 283, 492; *DhA.* 15.3), victories being reported on both sides, with a marriage alliance at the end. The cause is a village near Kāśī, part of Ajātaśatru's mother's dowry, which Pasenadi wished to rescind. The fact that Magadha conquered ultimately is uncontested, for before the time of the Mauryans, Kosala is already part of the Magadhan empire. For the Paila hoard of punchmarked coins, it is of the utmost importance to determine just when Kosala faded out as an independent kingdom. This could not have been later than Mahāpadma Nanda, and I suggest that it was far earlier, either at the time of Ajātaśatru or immediately after. In the first place, we hear of no ruler of Kosala after Viḍūḍabha. The centre of gravity shifted to Magadha, where the first council after the Buddha's death is held at Rājagṛha; but Kosala was more important during the Buddha's lifetime. The Buddha himself spent at Sāvatthī, no less than 25 'rains' during the period of his ministry, far more than those spent in all other residences put together; 871 suttas of the four Nikāyas are supposed to be pronounced at Sāvatthī. There were many converts at Sāvatthī; the most famous lay follower being the trader Anāthapiṇḍika (Sudatta), whose gift of the Jetavana (purchased at a fantastically high price: a very rare case of land being bought outright for cash) is one of the great themes of Buddhist art. King Pasenadi was also a patron, though preoccupied. Viḍūḍabha's massacre of the Sakyans did not mean persecution of the *saṃgha*, any more than Ajātaśatru's killing Bimbisāra and smashing the Licchavis prevent the Jains claiming him as one of themselves. Thus the shift to Magadha was part of a general trend, not confined to Buddhism. Finally, Ajātaśatru had a claim upon the Kosalan throne which could not have been pressed long after him: he was nephew as well as son-in-law of Pasenadi. It was to him that the aged Pasenadi, abandoned by all except a servant woman, fled for help against Viḍūḍabha, only to die outside the walls of Rājagṛha; Ajātaśatru performed the obsequies. His ministers are supposed to have dissuaded him from attacking Viḍūḍabha, but the principal reason for abstinence is undoubtedly the Licchavi-Malla campaign. Without a secure rear, an attack against Kosala was unthinkable. On the other hand, Viḍūḍabha was engaged at the same time in crushing the Sakyans, so that he could not have attacked Magadha; soon after the Sakyan massacre, he was swept away with a great portion of his army, by a sudden freshet (*DhA*. 4.3), the camp having been pitched in the dry bed of the river Rapti (Aciravatī). Thus towards the end of Ajātaśatru's reign Kosala had neither king nor much of an army; that we hear of no successor to Viḍūḍabha is therefore peculiarly significant. In view of the 'legal' title, there would be no opposition to any Magadhan attempt upon the the throne of Kosala.

The purāṇas (*DKA*. 21) state that Śiśunāga, supposed founder of the dynasty to which Bimbisāra and Ajātaśatru belonged, defeated the Pradyotas, ruled in Girivraja (older Rājagṛha), establishing his son as ruler in Kāśī. This is impossible without a conquest of Kosala, which certainly could not have taken place four generations before Ajātaśatru. As a matter of fact the Pradyotas rule Avanti, supposedly with capital at Ujjain. This is much too far for any real fighting with Magadha at so early a period. We have two stories of conflict with the Pradyotas, the first being with the Vatsa or Vaṃsa prince Udena (skt. *Udayana*), king of Kosambī (skt. Kauśāmbī). This ends with an elopement of Udena with the Pradyota King's daughter Vāsuladattā (*DhA*. 2.1.4), after the Pradyota had taken him prisoner. But that queen then drops out of the stories which concern an Udena who was contemporary of the Buddha, being husband of the beautiful and proud Brahmin girl Māgandiyā (*DhA*. 2.1.5) first offered by her father to, and rejected by, the Buddha. This story has a historical appearance, for the gotra is found in Brahmin lists as Magaṇḍa or Magaṇḍa (but not the Mākandika of the *Divyāvadāna*); the queen did her best to avenge the insult offered by the great Sakyan. Therefore, the other Udena romance must (if historical) be of some king not the contemporary of the Buddha. My work on the Taxila hoard shows the possibility of some Buddhist records being correct; they mention a Susunāga (*Mahāvaṃso* 4.5–6), fifth after Ajātaśatru, who was placed upon the throne by the people. This would be the proper time for an invasion by and repulse of the Pradyotas, and the line of Magadhan kings would *end* as Śaiśunāgas. The

Upaniṣads (*Br. Up.* 2.1; *Kaus. Up.* 4.1) mention an Ajātaśatru, king of Kāśī, and it is quite possible that towards the end of his reign our Ajātaśatru did acquire Kāśī, perhaps the whole of Kosala, just as he had retained his claim to the village in the Kāśī territory by fighting with Pasenadi. Ajātaśatru cannot be contemporary of Janaka; *CAI* 122 misunderstands the king's wish to emulate the already legendary Janaka.

The Mallas were not under Pasenadi. They exercised, as did the Licchavis, powers of life and death over all in their territory, though otherwise such powers were the prerogative of a *mahārāja*, not of lesser oligarchs like the Sakyans. A Malla-Licchavi confederacy, as reported by Jain sources (*Jain* 382) is highly plausible (though the Licchavis having an absolute chief at Vesālī who was a Haihaya, is not). But many of the 18 confederate clans belong to Kāśī-Kosalan territory, which means the absence of any real monarchy in Kosala. In destroying the federated tribes, Ajātaśatru must also have invaded what had been Kosalan territory or at least sphere of influence.

We hear of Ajātaśatru fortifying Rājagṛha a few years after the Buddha's death (*MN.* 108) against an expected invasion by the Pradyota king, though such an attack would have been quite difficult; we hear nothing more about the actual fighting, if any took place. The fortifications however exist, being in all probability the cyclopean walls of Rajgir. There is nothing against Ajātaśatru having turned his attention westwards after settling the Licchavi problem; this would make it still more likely that Kosala was annexed to Magadha either by him or by his immediate successor.

5. *Economic Basis of Contemporary Religion and State*

What was the mainspring of this expansion? What is the change in society that brings to the surface two great and similar religions, not to speak of similar parallel sects, such as the Ājīvakas? The answer seems to be fairly simple: the increase of population and of trade. The very style of Pāli texts is vastly different from those of the Brahmins. The unmistakable character of Brahmin writing is not its insipidity but its rustic stamp, though Brahminism is characterized by its extreme, facile adaptability in practice combined with rigid and apparently immutable theory, which leads to a blinking of the facts, to a neglect of reality paralleled only by other priest-ridden societies and literatures. The real Brahmin of the *Gṛhya-sūtras* is firmly based upon the village, despising and avoiding the town (*CAI* 237); the theory goes with him unchanged even when he has moved over to the town and forgotten the very appearance of the tutorial grove or forest; when he has learned to indulge in and profit by almost any trade. But in the early Buddhist literature the prominent class of lay followers is that of the traders and 'treasurers', people who bought and sold; also of those who followed the professions for a living. In addition, people of any caste could change their means of livelihood at will (*CAI* 203–4), in strong contrast to the smṛtis. Buddhism and Jainism preach *ahiṃsā* successfully because it was an *economic* necessity. The killing of animals in *yajña* sacrifice had become an intolerable burden upon the subjects whose cattle were taken away without compensation; the fruits of the *yajña* were success in battle, and the constant warfare implied thereby meant heavy losses to the traders, and general distress. The whole basis had to be denied, and non-killing, which is what *ahiṃsā* means literally, cuts at the roots of both sacrifice and war.

Primitive religion differs from civilized religion in one main respect, no matter.how much of the ritual is carried over. The earlier type concentrates upon the cult and its ritual alone; the correct performance of certain rites brings certain fruit. In the commoner cases, this yield is to be seen in the present world, in the way of better crops, avoidance of disease and of the deadly spirits that might cause it; perhaps success in ventures. But a very important portion deals with the problem of continuity, of what happens to a person after death. Something of the individual is supposed to survive, though it might be in changed form and of impalpable substance as in the dream world. Here comes the essential difference between the two types of religion: the latter substitutes, to a considerable extent, good deeds and the good life for correct ritual. The change is due to the existence of a form of society far more heterogeneous than the original simple tribe-community. It is a discovery of the first magnitude that religion can be used to ease the difficulties of early society, to make the common life of diverse elements of society easier.

The Buddhist sermons make clear the duties of a householder; its prime virtues such as truthfulness are social virtues. There is no Buddhist ritual whatever. The basic theory of transmigration may have been totemic in origin, the dead man reverting to the original totem animal that had first been the food of the tribe, hence its very substance; and ultimately become taboo (another basis for *ahiṃsā*) except in ritual feasts by one of those dialectic inversions that mark crucial changes in society. But observe that a man's action, *karma* weighs his soul, and automatically fits him for the body he will occupy in his next birth. Buddhism claims to point the way to the negation of this otherwise unending cycle of rebirth, but the action of Karma is a trade, barter, or wage-payment transaction. It differs as greatly as possible from the earlier ritualistic conception of an after-life, and from the later developments which substitute a short cut by means of *bhakti*, faith in a personal god. Ritual is a matter of individual choice for the layman, and often there are polemics against ritual as well as against Brahminical pretensions (*Jat.* 545). Finally, the new proponent of the religion bases himself upon the goodwill of society, living only by its alms; he does not support the king in sacrifice nor does he receive whole villages in fee as does the Brahmin priest. In its initial stages, therefore, Buddhism succeeds because the *karma* doctrine, the social rules deduced from it, and the much cheaper mode of life of the almsman all appeal, economically as well as philosophically, to *the society in which trade had gained a new importance*, and which consists of many diverse types of tribal or local units in close contact.

Exactly the same needs demand an absolute universal monarchy, the tyranny of one rather than the tyranny of many; along with this, freedom from robbers that infested the great forest which still covered much of the land between settlements, freedom from irregular and excessive tolls charged by petty rulers or tribal oligarchs, and the opening of new trade routes. This can be proved very easily; at the same time it will be seen that Magadha had to be the centre of the new kingdom, whether it conquered the others or was conquered by one of the others.

The first land clearing in this region ran along the Himalayan foothills, as beginning of the transition from pastoralism to agriculture. The course of development is quite clear. The Gangetic plain is alluvial, and in its original state, must have been densely forested, swampy in many places, and certainly devoid of heavy settlement till the age of metals, specifically the age of iron, had set in. This is one of the reasons for dismissing Pargiter's theory of ancient Indian historical development, outward from the Gangetic plain. The Nile, the Mesopotamian rivers, and the Indus permitted the first urban civilizations to develop because of the surrounding desert. Heavy land clearing was unnecessary. Along the Danube, the loess corridor allowed neolithic man and his successors to farm without fighting heavy forest. The rainfall and warm climate of the Gangetic valley would make riparian settlements impossible for neolithic man. Even at the time of the Buddha all movement ceased during the rains, which shows that the roads were mere cart tracks, rivers crossed by ferry or ford, and the land, mostly jungle, dotted with settlements. Under present conditions, the summer with its heat and dusty winds would be a far worse season for the wandering almsman in U.P. than the monsoon. When Pasenadi began a campaign during the rains (*Jat.* 176, 226) he not only lost to the borderland rebels, but also scandalized the Buddha by this infraction of what had become a scriptural rule. Alexander's success against Poros seems in part due to this sacrilege.[11] The first river settlements, presumably at Allahabad (Prayāga), perhaps also Benares (Kāśī) and the like must almost certainly have been founded by refugees from the Punjab, driven eastwards by the Aryan invaders; undoubtedly, their enemies must have followed in their wake. When Hastināpura was destroyed by flood, Nicakṣu shifted his capital to Kosambī (*DKA.* 4–5). But the major early settlements all lie along the northern foothills. The process of development is set forth in the *Śatapatha Brāhmaṇa* i.4.1.14 ff; the land was burned over, swampy places dried up, and cultivation could then begin. The extreme limit of this went as far as Videha. The trade route then swung down to Patna, and across the river to Rajgir. This is the route from Sāvatthī to Rājagṛha followed by traders like Anāthapiṇḍika, and which the Buddha had begun to traverse in the opposite direction from Rājagṛha when death overtook him near the Malla settlement at Kusinārā. The road would not be difficult to trace, as it passed through Vesālī, Setavyā, Kapilavastu, Kusinārā, Pāvā, Bhoganagara. Another went from Sāvatthī south to Sāketa and Kosambī, thence presumably to the Avanti kingdom. Both of these are good targets for systematic archaeology. The unit distance is the yojana, approximately nine miles (though the *Arthaśāstra* yojana was about 5 miles), the distance after which carts were outspanned. On special roads, there seem to have been royal stages for horse-chariots, the *rathavinīta* from which *MN.* 24 derives its name, and which must have been about the same as the yojana, for six yojanas separated Sāvatthī from Sāketa, while king Pasenadi completed his journey between those two capitals in the seventh stage. The stages and outspanning places should be traceable even now. The western route from Sāvatthī led to Takkasilā 147 yojanas away, and presumably allowed trade with the Delhi-Mathura region on the way. Taxila was a great centre of learning, as is seen from the tradition that Pasenadi, the Malla Bandhula who was later his minister, and the Licchavi Mahāli who afterwards took service with Bimbisāra had studied there together in their youth (*DhA.* 4.3). The much earlier Kosalan prince Chatta fled to Taxila after Brahmadatta of Benares stormed Sāvatthī and took his father captive; he studied the three Vedas there, and returned to find buried treasure by aid of which he recovered his kingdom (*Jat.* 336). Brahmin tradition supports this, for eastern Brahmins travel regularly to the distant northwest to learn their main business, the fire-sacrifice (*Br. Up.* 3.4.1, 3.7.1). The punch-marked coins found in great profusion at Taxila belong to Magadhan kings for the greater part, even before the Mauryans.

Rājagṛha is an exception to this, being on the opposite bank of the river, though still in the foothills, this time of the Vindhyas. I suggest that its original importance derived from the minerals; in particular iron which is found as easily smelted surface deposits in Dharwar outcrops, of which the hills about Rajgir consist. More would be available by trade from Chota Nagpur, where there still exist iron-working aboriginal tribes. From the Nepal hills, copper would be the likelier metal, but even this is more easily available in Bihar. No metal is to be found naturally in the immensely fertile alluvial portion of the Gangetic plain, the portion which is the most densely settled today and which had to be cleared with the greatest labour—labour which would have been impossible without iron. But given iron tools, the rapid opening up of U.P. proper was inevitable. According to J.A. Dunn, *Memoirs of the Geological Survey of Indiä*, LXIX, part I, 1987 (reference by courtesy of Prof. K.V. Kelkar), Singhbhum district has very ancient workings of copper mines (pp. 54–5), though the date is uncertain; the working technique was most efficient. At the time under discussion, the great demand and logical outlet for metals would be towards the fertile but heavily forested plain of the Ganges, with its great and increasing population. Of course, India's greatest deposits of iron as well as of copper occur in Singhbhum and Dhalbhum. *The location of Rajgir is due also to its straddling this trade-route for metals*, north-west to the U.P. The distance from the richest sources of ore is less than two hundred miles; Gaya is nearer, but would be more difficult to settle without cheap metal tools, whereas the hills about Rajgir make for less dense forest. The later port for this region was Tamluk, and place names beginning with *tāma* mark ancient though later forgotten sites of copper deposits. The absence of pumps seems to have stopped mining at water level, and may have been one of the causes of later Magdhan decline.

With heavier trade which would follow the rapidly increasing population near the river, the Ganges becomes the easiest major route for mass transport, as compared to the old, slow, expensive, and unsafe, land routes. Thus Kosalan expansion towards Kāśī is the natural search for a port, an outlet. Rājagṛha was similarly attracted towards Patna, which inevitably became the major trade centre, the greatest port, and so the capital. The last step, of shifting the capital, was taken by king Udāyi

(*DKA*. 22), son according to Buddhist (*DN*. 2) and grandson by purāṇic sources of king Ajātaśatru. But we are very fortunately placed in being able to discover the first steps also. These were taken during Ajātaśatru's reign by the ubiquitous mahāmātya Vassakāra, in building a fortress at Patna. The place was already a depot where parcels of merchandise were opened for barter (*puṭabhedanam*). But the Licchavis and Ajātaśatru both levied toll upon the traders, who were ruined thereby; the Licchavi tolls seem to have been more irregular, and less justified, or at least with less protection attached thereto. So in the last year of the Buddha's life, we hear (*DN*. 16 and *aṭṭhakathās*) that the stockade built by the traders was being magnified, and the city properly founded as a base of operation against the Licchavis. The most profitable trade then was that down the Himalayan watershed, and consisted to a great extent of perfumes and cosmetics, which are of the utmost importance in a hot climate where bathing is a necessity, refrigerants a discovery for the future. Of course, it is clear that a strongly fortified city at Patna would reduce the importance of Benares as a great port, and would at the same time enable a blockade of the great river to be set up. That is undoubtedly the reason why Ajātaśatru refused to give up his foothold in the Kāśī territory, though as usual only personal motives are alleged for such economically necessary actions.

Trade is primarily by caravans sent by the leading merchant of one centre to that of another distant centre, and the caravans bring back local goods in exchange (*Jat*. 90). Nevertheless, the new society needs and uses coinage, which cannot be older in India than the seventh century BC; that is about the period at which it appears elsewhere in the world. In Buddhist works, in any case, the *kahāpaṇa* (skt. *kārṣāpaṇa*), meaning thereby the silver coin at the earlier stages and probably a bronze coin by the time of the commentators, is standard measure of value. Commodity production as a whole is still at a very low level, but certain luxuries (such as fine cloth from Benares) and certain necessities like salt meant trade over a long range. Had metals been more plentiful, and commodity production at a higher level, chattel slavery would have been far more general. But we find the chattel slave rare, usually some sort of an accomplished servant, and all slaves are treated better than the paid servants (*DhA*. 5.1 gloss). The *Arthaśāstra* forbids the sale even of a Śūdra living as a free man (*āryaprāṇa*), and the Śūdra was the great source of expropriable labour. Even Brahminical works insist upon avoidance of the bride-price (*Manusmṛti* 3.51), for it might seem purchase of the woman, thus degrading her to the status of a slave. I suggest that the absence of slavery and the ultimate victory of Brahminism are both connected with the low density of commodity production, which made trade in human beings unnecessary, and country life as easy as that in the cities.

6. *Chronological Possibilities*

While the outline seems simple enough, its details are not, and it is necessary to point out the virtual impossibility of constructing a detailed chronology from conflicting sources. As far as kings are concerned, there is no need to prove the statement, which will be found true by anyone who takes the trouble of comparing our records. But even for uncontested Buddhist sources, the dates are not only doubtful but the time sequence is often impossible. Look, for example, at the story of Pasenadi, Viḍūḍabha and Ajātaśatru. The last is supposed to have become king eight years before the death of the Buddha. Pasenadi, being of the same age as the Teacher, must then have been in his 72nd year. After that he fights several battles with Ajātaśatru; during flights from one of which he sees the sixteen year old Mallikā and makes her his chief queen forthwith. But she seems to have alternated with Vāsabha-khattiyā as chief queen, and survived Pasenadi according to the *Aṅguttara-nikāya*. Viḍūḍabha visits the Sakyans during his father's lifetime, being himself then sixteen years old, overhears a servant woman talk of him as 'that slave-girl's son', learns of the deceit, and vows to wash his throne with Sakyan blood. This vow he fulfills at the very earliest opportunity. But the usurpation takes place in Pasenadi's (and the Buddha's) 80th year. After that, Viḍūḍabha makes three attempts (which I should take as three separate annual campaigns) upon the Sakyans, turning away each time because of the Buddha's quiet intercession. The fourth time, the Buddha recalls that the evil *karma* of the Sakyans in poisoning the river against their Koliyan neighbours has come to fruition like a maturing debt, and must be paid, so does not intervene. But the Buddha himself died in his eightieth year, while travelling slowly on foot from Rājagṛha on the great trade route. He did not get as far north as Kapilavastu, dying at Kusinārā on the way. Moreover, he passed the rains near the Licchavi headquarters, which would give no time for a meeting with Pasenadi, and makes the triple saving of the Sakyans a pure miracle. Even the commentators are not clear about Buddha's meeting with Sāriputta in the *Mahāparinibbāṇa-sutta*, for Sāriputta was supposed to have died before this period. Some of these details may undoubtedly be clarified by discarding the miraculous and fabulous element—not always simple with Buddhist or any other ancient

Indian works—but it seems to me that the precise chronology we need cannot be worked out by these methods.

7. *Megasthenes and the Arthaśāstra*

The account of[12] Megasthenes, properly evaluated, enables us to date the highest development of one particular and hitherto unrecognized form of production in India.

Seven distinct classes (*meros*, Diodorus and Strabo; *genea*, Arrian) of people are reported which amount to castes, seeing that custom and law forbid intermarriage, change of profession, or transition between groups. That Megasthenes actually said this is not to be doubted, from the accord among the quotations (Diodorus 2.40–41 = *M*. 38–41; Strabo 15.1.39-48 = *M*. 83–6; Arrian 10–12 = *M*. 214–18). The confusion arises from modern scholars' attempt to reconcile the seven classes with the traditional four Indian castes. The classes are: 1) Brahmins and ascetics; 2) husbandmen; 3) herdsmen-hunters; 4) artizans and retail merchants; 5) fighting men; 6) overseers who report to the king or the magistrates of free cities; 7) the great councillors who determine policy, officer the armed forces, and regulate all affairs of state. It is denied by modern scholars that these seven major castes could have existed, because the Śūdra is absent, the husbandman and merchant should both be members of the vaiśya caste, and there could not possibly have been enough overseers nor councillors to form two separate castes by themselves. Of course, the *Arthaśāstra* sticks to the theoretical four castes in its preamble, and is simultaneously condemned as a later document, making no mention of Pāṭaliputra, or Candragupta, or any other king, city, or empire; nor showing acquiantance with imperial affairs such as must have concerned the ministers of Candragupta Maurya.

There is no doubt about the first class, that of Brahmins and Śramaṇas who have been included in one category. This does not detract from the value of Megasthenes's testimony, for the two are grouped together in that order, by one compound word, in Aśoka's edicts. They clearly enjoyed equally high position as holy men, the classification into a single caste being permissible because the śramaṇas were celibate in any case. We are also told that becoming a 'philosopher' was the only change of caste allowed to any of the others (*M*. 86,218). Caste 5 of warriors, second greatest in numerical strength, is clearly the Kṣatriyas. They pass the time of peace in idleness and sport, so well are they paid by the king; all their equipment comes from the ryoal arsenal, the elephants and horses from the king's stables, the care of these in war or peace being the task of others. The implication of this has been missed, for it means that *with negligible exceptions, all able-bodied male kṣatriyas had been organized into the king's paid standing army*. For support, we find in the *Arthaśāstra* that the hereditary army, entirely of highly trained kṣatriyas, is the best (*A*. 6.1); the author himself says in emphatic contradiction of preceding theorists, that a compact standing army is better than disbanded forces (*A*. 7.9); in 9.2 we find auxiliaries mentioned, but the order of importance is always the hereditary standing army *maula*, temporarily hired *bhṛtaka* recruits (both noted together by Megasthenes as the fifth caste), guild-soldiers *śreṇī* (perhaps remnants of tribal or city fyrds), troops of an ally, and wild tribes. Megasthenes's third caste, herdsmen, settle neither in towns nor cities, but live as pastoral nomads and hunters in tents (cf. *A*. 2.29); this is interesting as a survival of the traditional ancient mode of Aryan life, inevitably degraded in the presence of civilization.

The main difficulty arises from equating the second caste, husbandmen, to the vaiśyas. It is true that the Greek *ge ōrgos*, Latin *agricola* does mean husbandman, exactly as did the original, traditional vaiśya: 'settler'. But what are the characteristics of this class of cultivators according to the Greek envoy? First, that they form by far the greater part of the population, producing the surplus upon which society rests; for none of the other six classes produce any food at all, except the herdsman in some trifling measure. They don't own the land, for a 25% tribute (*M*. 84) *plus rent* (*M*. 39–40) is to be paid to the king or the free cities. They never enter the cities for any purpose (*M*. 84), but live all the time in the villages with their families (*M*. 39). They are not furnished with arms (*M* 216) and are 'exempted' from military duties (*M*. 39, 83, 216), so that they may be seen ploughing calmly within sight of contending armies, which never harm them (*M*. 84, 216) nor devastate the land (*M*. 39). This idyllic life, however, meant that the cultivators were totally disarmed; for even the wild beasts and birds that damage their crops have to be killed by the *third* caste, (*M*. 40, 84 'who alone are allowed to hunt, and to keep cattle'), not by the second. Moreover, they have no property at all, for the land does not belong to them nor have they any cattle (which belong to the 'herdsmen'), and they cannot follow any other profession; they *cannot* enter the cities for any purpose, whereas the vaiśya could and did, being a leading citizen in the free city. So we have in reality *a description of the śūdra*. Once again this is confirmed by the *Arthaśāstra* (*A*. 2.1): The king should establish new settlements or repopulate deserted ones by inviting foreign immigrants or deporting settlers from his own overpopulated centres. Each village is to be made up of between a hundred and five hundred families of *śūdra cultivators* (śūdra-karṣaka). Administrative centres are to be set up for groups of 10, 200, 400, 800 villages. A few priests actually serving in the locality are to be granted tax-free lands. Superintendents, functionaries, accountants, doctors, veterinaries, messengers and such officials may be endowed with land which the individual holds for life, cannot alienate by sale or mortgage; however, officials in general have a regular stipend, as do the watchmen and specially hired labourers (*A.* 2.24). If the holder failed to cultivate it properly, the land would be reassigned by the state to someone else except perhaps when the holder had just brought waste land or wilderness under the plough. No ascetic other than one who has adopted a forest retreat for his own individual salvation is to be admitted to the villages; this means that no one proselyting for a monastic order could gain entrance. No place of communal entertainment, nor resting place may be built in the village; professional actors, dancers, singers, musicians, raconteurs, bards are also completely excluded. 'For from the helplessness of the villages and exclusive preoccupation of the men with land comes wealth' of all sorts. This wealth is not for the cultivator, who can hardly use it, but for the state treasury. We are very far here from the idyllic life depicted by so many who wrote of Indian villages from modern observations made at a safe distance and from the property-owner's point of view. The 'idiocy of village life' was deliberately intensified as a method of exploitation.

There are two reasons for misinterpretation of the śūdrakarṣaka-geōrgos as a vaiśya. One is the projection of a supposedly immutable village system from eighteenth and nineteenth-century India into antiquity. The other is that the Greeks were deeply impressed by the fabulous nature of a country which produced incredible beasts like the elephant, plants like cotton and sugarcane, sweet tasting rock crystals (sugar!), deciduous trees that never shed their leaves, tremendous rivers, and an extraordinary soil yielding two bumper harvests every year. On the same level (from the Greek point of view) as the fantastic, mythical, gold-digging ants was the attested truthful and law-abiding nature of the Indian in the absence of written law codes or written contracts. Arrian 12 (*M.* 217) says explicitly, 'but indeed no Indian is accused of lying.' This could never be said of the *Graeculus esuriens*. Most striking of all was the fact that the Indian economy flourished, so incomprehensibly to the Greek mind, without chattel slavery. 'Of several remarkable customs existing among the Indians there is one prescribed by their ancient philosophers which one may regard as truly admirable. For the law ordains that no one among them shall, under any circumstances, be a slave, but that, enjoying freedom, they shall respect the equal right to it which all possess; for those (they thought) who have learned neither to domineer over nor to cringe to others will attain the life best adapted for all vicissitudes of lot. For it is but *fair and reasonable* to institute laws which bind all equally, but allow *property* to be unevenly disturbed' (Diodorus Siculus ii.39 end, *M*. 38; my italics). The trouble here is not with Megasthenes, but with the sentimental and idealizing embroidery of Diodorus, proved by the utopian island which he reports as visited by one Iamboulos (ii.55–60), at the end of the very same book; which may be a traveller's tale based upon the name of the island of Socotra, derived from *Sukhadhārā*, the land of bliss. There is no such concept of equality in what survives of Megasthenes nor in any Indian source. The case is made much worse by misleading translation, which I have italicized. The last sentence in C. Müller's Latin conveys exactly the opposite sense, namely that it would be the act of a simpleton to promulgate equal laws for all with unequal status and opportunity (between slave and free). The Greek *euēthes* and *exousias anomalous* are surely better represented by 'stultum' and 'inaequalitatem facultatum', than by the English phrases above.

The Greeks could not recognize slavery in India. 'All the Indians are free, and not one of them a slave. The Lakedemonians and Indians here so far agree. The Lakedemonians, however, held the Helots as slaves and these helots do servile labour; but the Indians do not even use aliens as slaves, and much less a countryman of their own' (Arrian, *M*. 210–213). This is not to be doubted. The Greek *doulos* originally meant a slave by birth, to be distinguished from *andrapodon*[13] the captive (taken in war or kidnapped) sold into slavery. Such war-prisoners were a legitimate and most valuable part of the booty in Greek and Roman campaigns. If the Indians had any such type of slavery, Megasthenes would certainly have known of it; he was the ambassador of Seleukos, who had just lost a war against Candragupta. We have already examined the tradition in India as regards slavery. The *Arthaśāstra* forbids the sale of any one, even a śūdra, who lives as a free man and does not belong to some (obviously unimportant) recognized category of slaves. Inasmuch as the Greeks saw a parallel betwen Sparta and India, we have only to consider what Lakedemonian helotage had been originally, before approximating to slavery in a powerful slave-holding and slave-trading environment. 'The Lakedemonians held the Helots as state-slaves in a way, having assigned to them certain settlements to live in and special services to perform' (Strabo, 8, 5.4; trans. Loeb Classics, H.L. Jones, 4.135). The Mauryan śūdra is a helot, as had been his predecessor and equivalent, the dāsa in Vedic tribal economy; dāsa is indiscriminately equated to śūdra, servant, and slave. The śūdra caste made slavery unnecessary, and yet enabled the forested Gangetic plain to be brought under cultivation.

Thus Megasthenes and the *Arthaśāstra* corroborate and supplement[14] each other in a remarkable, unexpected way. The latter work has no feature to give it *scale*; it can, on a first superficial reading, easily be mistaken for a manual of administration for some princeling who rules no more than a county (*janapada*). The extraordinary situation revealed to us by the *Arthaśāstra* and Megasthenes is that *crown property is overwhelmingly the main basis of production, and its profitable administration the chief preoccupation of the state*, which replaces private enterprise to an extent never seen before or after in India. Even prostitution, like mining, and mines, is directly under the exchequer with a special ministry (*A.* 2.27). There are no feudal landlords worth notice, nor any *nāgaraśreṣthī* like Anāthapiṇḍika who is richer than the princes whose lands are crossed by his caravans. If Roman and Greek historical writers deal primarily with events of national and international importance, it is only because the exploitation of occupied territory was the natural prerogative of certain classes, not taken over directly by their instrument, the state. With Kauṭalya[15] everything is state-regulated to the last detail: cities and markets; road construction and transport; rivers, canals, irrigation; care and convoying of foreigners; land measurement, division, taxation; registration of births and deaths (even now unsatisfactory in India!); levy of sales taxes and tolls of every sort; public supervised sales of manufactured articles, as well as supervision of artizans. (Strabo 15.1.50–2, *M.* 86–8). Both sources agree here, the Indian giving detail, the Greek the immense scale upon which the operations were conducted. Given the caste structure of Indian society, there is absolutely no reason to doubt that the multitude of lower state functionaries would develop into a separate caste, as also the higher ministers, *at that period.* This is what Megasthenes reports, though the śāstras don't trouble to recognize the transient phenomenon, which disappeared with the over-centralized, government-entrepreneur empire, just as the *Arthaśāstra* was forgotten except by name. The existence of free cities mentioned by Megasthenes appears to be supported by some Mauryan punch-marked coins that bear the emperor's personal mark, with homo-signs or some group-mark in place of the usual symbols of sovereignty. It must be remembered that such cities would have a tribal origin, and a guild structure. The other fact to be kept in mind is that both the *Arthaśāstra* and what remains of Megasthenes are concerned with the major features, not with every single minor form of production; India is a country of long formal survivals even after substance and basis are obselete. The essential is that the city, free or not, is an administrative centre, no longer a centre of tribal assembly and warfare. There is no class structure between the primary producer and the coercive mechanism (the state); the mechanism of violence is controlled by the centre, namely the king and his bureaucracy.

This system must have reached full bloom with the Nandas (about 400 BC), whose proverbial wealth and prosperity are attested by the great variety and accurate minting of their silver punch-marked coins. Its main effect was upon the Gangetic and Indus valleys, and the regions about a few cities elsewhere, the rest of Aśoka's empire being undeveloped, with great variety of survivals. The inevitable expansion carried with it the seeds of decay. In the absence of slavery, with the śūdra deported from the cities, and tight control of manufactured goods and its prices from raw material to the finished article, civic production would certainly not suffice for the whole countryside from Afghanistan to Bengal and the Himalayas to Mysore. Nevertheless, more land is steadily being brought under cultivation by means of the tools made in the cities. The immense distances and poor transport would also make central administration most cumbrous, accounting progressively more complicated, official peculations increasingly harder (*A.* 2.7–9) to check. Certainly, the Mauryan silver coinage as a whole, particularly after Candragupta, shows far greater proportion of copper with much rougher weight adjustment than before—symptoms of tremendously increased demand for currency, logical corollary of the opening up of the whole peninsula for the first time. The minute reverse marks of the pre-Mauryan coinage also disappear, to be replaced by a single issue-mark, presumably at the mint, which again confirms rigid state control, to the exclusion of former important merchant guilds. A natural step would be that the artisan, or at least his technique, first moved to the countryside, thus bringing about the full development of self-sufficient rural units. The state machinery would have to be dispersed in consequence. Increasing the number of stipendiary superintendents would be impossible, which means the necessity of creating new classes of owners, new intermediate relations of production between state and producer. That is, the Kṣatriya has also to move to the countryside with small forces scattered over village territory. The Brahmin is as important in making the people submissive; he has already a foothold as priest and medicine-man, with tax-free lands; the rusticity of the Gṛhya-sūtras is now turned to good account, becoming incurable, if indeed it does not first come into existence at this stage. That my argument is not purely *a priori* may be seen by comparison of the king's duties in the forgotten (because the productive forms were obsolete) *Arthaśāstra* with the later but much more pretentious and sanctified *Manusmṛti* (*Ms.* 7.111–43; 7.195–6; et al.). Taxes have fallen below the *Arthaśāstra* level because they are mainly levied upon property owners; the śūdra though free still has no property, nor can release by any master free him from servitude (*Ms.* 8.414) to the three Aryan castes. The main revenue of the *Arthaśāstra* was the tribute on grain from state lands *sītā*, which has disappeared altogether; the minor taxable forms called *rāṣṭra* by the *Arthaśāstra* are now synonymous with 'country'. This means that state production no longer exists. Nothing is said about transport, irrigation, or supervision. The villages are grouped in much smaller units, with a chief over every village and unit whose compensation is ownership of a certain amount of land. Local garrisons appear (*Ms.* 7.114–15) whereas the *Arthaśāstra* wanted only frontiers to be strongly held. The artisan and the śūdra labourer of the *Manusmṛti* give the state one day's free labour per month, *the corvée in lieu of taxes* (*Ms.* 7.138). Worst of all, the immunity of land and villager that struck Megasthenes has disappeared. The peasant is no longer allowed to witness the ruin of empires while concentrating upon some miserable patch of land, for the royal invader is enjoined to ravage the countryside thoroughly whenever the enemy cannot be directly attacked (*Ms.* 7.195–6). At this stage, the Mauryan central administration is necessary. The Gupta capital Ujjain was never the world's greatest city, as Patna had been in its prime, though the centre of as large and even more prosperous an empire. Patna itself dwindled to a village before the time of Hiuen Tsang. While total production increased, *commodity* production went down in density if not volume. This was the difference between the land seen by the Greeks and the apparently changeless countryside visited by later foreign travellers. The victory of *Manusmṛti* Brahminism means also the absence of common law, each caste, guild, profession and locality being entitled to its own customary legal traditions (*Ms.* 8.41). The *Arthaśāstra* recognized the need for a legal structure which transcended these barriers, though caste privilege was, to a certain extent, allowed in its *jus gentium*, being a primitive form of class privilege.

There are two important points of contrast. The *Manusmṛti* administrator is appointed by the king but not paid a salary; he lives off the country. The village chief has as his perquisites the food, drink, firewood which would be supplied to the king (if in residence). The head of ten villages enjoys the income of a family holding (*kulaṃ*, *Ms.* 7.119); the chief of twenty gets five times as much, that of a hundred the revenues of an entire village, and of a thousand the revenues of a whole town. This is clearly the beginning of feudalism, and it may be worth noting that G. Bühler in his translation of the *smṛti* (*Sacred Books of The East*, xxv, preface, pp. cvi ff) believed the work to have been completed between the second century BC and the second century AD. Second, the merchant is to be taxed (*Ms.* 7.127) with due regard to the prices of purchase and sale, depreciation and expenses of the trip, length of the road to the market and expenses for protection against thieves on the way. This shows a consideration entirely foreign to the *Arthaśāstra*, where the merchant was in fact a competitor of the royal monopolies, and treated as a natural criminal of sorts. Cash transactions are so low that royal menials are paid only 1 to 6 copper paṇas a day, a droṇa of grain monthly, and clothes every six months (*Ms.* 7.126). According to *A.* 2.24, the *sītādhyakṣa* (of a janapada) is to cultivate all the best (most-ploughed) land under his own direct supervision, with free (*karmakara*) labour or forced labour including the royal dāsas and the prisoners who work out their fine. What is left over, however, allows private enterprise to enter; the half share cultivators (*ardhasītikas*) may be allowed to work such surplus land, or the quarter or fifth shares, the difference between the two being that the latter have nothing except their own bodily effort to put into the land. It follows that even in the *sītā* those who owned oxen and implements of their own had a certain interest. The essential is that this did not develop into permanent tenure or private property during the time of the *Arthaśāstra*; when it did by the period of the *Manusmṛti*, the sītā would cease to exist, becoming indistinguishable from the rāṣṭra.

8. *Termination of the Arthaśāstra System*

The foregoing section expresses a definite opinion, that the essential features of the *Arthaśāstra* do characterize the government described by Megasthenes; while it does not follow that the whole of the document must be authentic, the work is not entirely theoretical, it has a sound basis in reality, and the bulk thereof must belong to the time of Candragupta Maurya, though reporting upon older theory and tradition.

That the book may contain later additions or revision is not denied; still less, that the author was a Brahmin pedant. But the book is unusually consistent as compared to the *Mahābhārata* or the *Manusmṛti*. The Brahmin and Kṣatriya are allowed legitimate heirs (*savarṇa*) from women of one caste lower each. Differences between the four-caste theory (*A.* 1.3) and practice appear with the *vaidehaka*, synonymous with trader throughout the book, but in *A.* 3.7 the offspring of a kṣatriya woman by a vaiśya father; in *A.* 1.6, a Vaideha king Karāla is held up as bad example. This corresponds to the historical development of a tribe into a guild and then a caste. The mixture of castes is frowned upon, as in all Brahminical works, but it is really the fault of the king, who won't go to heaven if he tolerates it. For other transgressions, the *Arthaśāstra* relies upon a complete system of standardized cash fines, the separate items filling nine columns in the index to Shamasastry's translation.

The *Arthaśāstra* is not to be compared to Bismarck's memoirs, where a chancellor tells what actually happened, while trying to justify his own policy. We have no support here for the Mudrārākṣasa Grey Eminence tradition, except possibly in the final colophon—probably a later insertion. The book is not meant like that of Castiglione for a gentleman-courtier's training in superficials. Machiavelli's *Principe* draws different conclusions (incomparably rugged prose) from the career of princes like Cesare Borgia, presumably in the hope that one such would some day arise to unite Italy. If the 14th section of the *Arthaśāstra* is genuine, with its extraordinarily futile magic formulae, the treatise cannot possibly be meant for the vulgar gaze. The select few who would read would necessarily be other ministers like Cāṇakya, who are here made acquainted with traditional principles and theories, (not history), brought up to date and fitted to the reality as the author saw it, with considerable instruction as to the working of administrative departments. Though the principles and methods apply to states of any size, the declared purpose is aggrandizement, and the system could not long remain static, for growth or collapse are the only two effective alternatives it could admit as proved by history.

The *janapada*, which most of us mistake for the whole country at a first reading of the *Arthaśāstra*, is really the natural unit of administration. Originally, it means the territory of a tribe, with some city or group of small towns as headquarters, hence the *paurajanapada* of 2.1 contrasted to the new settlements. The Gangetic *janapadas* were widely separated by dense forests, which yielded to the highly profitable *sītā* cultivation of the *Arthaśāstra* king, as distinct from the *rāṣṭra* that had been settled by tribal or private enterprise. The first kings naturally develop from the tribal chiefs of a janapada; preservation of the janapada unit would enable local custom to be allowed for, as in *A.* 3.7, end. This would also account for the 'free cities' of the Greek observer, as the *paurajanapadas*, the newer settlements being ruthlessly taxed and controlled. The imperial superstructure covers, without destroying or standardization, an immense variety including the wild tribes (*āṭavikas*) which had not yet been

Aryanized; on the other hand, though the correct definition of *sītā* and *rāṣṭra* appear in *A.* 2.15, the differences tended to be obscured, as seen in *A.* 2.6, presumably by the royal power encroaching upon the prerogatives of older settlements, as well as penetration of state settlements or wilderness by individuals pioneers. Nevertheless it is only an indignent king (*A.* 2.1) who eats up the old settlers! No grasp of the *Arthaśāstra* is possible without understanding the fundamental difference betwen the few older free cities and the tremendous royal settlements peopled mostly by unprivileged Śūdras.

The pragmatic note is heavily stressed throughout. Practical considerations are ever the prime ones: *artha eva pradhānaḥ* says Kauṭalya in his own name in *A.* 1.3; spiritual and sensual considerations follow from the practical. Similarly, in *A.* 8.1 he again contradicts his preceptors: the army has its roots in the treasury; without a treasury, the army goes over to another, or kills its own master; *sarvābhiyogakaraś ca kośo dharma-kāma-hetuḥ*, the treasury is the first cause of religion and enjoyment. The writer has also grasped what few Indians after him realized: that real wealth depends upon command of production, particularly of raw materials, cereals, and heavy industry; the first is stated explicitly in *A.* 1.4. The last is made still clearer in *A.* 2.12: *ākara-prabhavaḥ kośaḥ*, the treasury depends upon mining, the army on the treasury, and he who has both wins the rich earth. The mine is the womb of war materials: *khaniḥ saṅgrāmopakaraṇānāṃ yoniḥ*. No Brahmin, however well-read, could merely dream all this up for himself, for the true Brahmin mind runs smoothly in quite different grooves, as for example the ritual exorcisms of *A.* 4.3 against national calamities.

The absolute control of metals would be easy for pre-Mauryan Magadha, which covered the natural outlets for India's richest deposits of iron, copper, and other metals in Bihar. By the mining industry, the author does not mean only precious metals and gems, but emphatically all sorts of tool-making metals and alloys, *loha = kālāyasa, tāmra, vṛtta, kāṃsya, sīsa, trapu, vaikṛnataka, ārakuṭa* (*A.* 2.17). In *A.* 2.12, minute directions are given for the state director to mine and smelt these ores, and to regulate their trade. In *A.* 2.21, the common metals and grain are among forbidden commodities, as are arms, military gear of all sorts, gems, and other royal monopolies. It then seems a contradiction to read in *A.* 2.22 the toll rates upon grain and metals, but this is explained by the line *jāti-bhūmiṣu ca paṇyānām avikrayaḥ*. No goods is to be sold by the private trader where it originates. In other words, the merchant had to add value to the commodity by transport to the ultimate market, incidentally paying tolls on the way. At the end, he would find not only his profit regulated, but also his wares sold by a state-organized sale such as Strabo reports from Megasthenes (*M.* 87). This has been laughed off as ridiculous and impossible, but the *Arthaśāstra* does confirm it once again. Not only are sales of local goods state monopoly (*A.* 2.16) but *A.* 4.2 directs the chief of the city market to separate new from second-hand wares (of which the ownership must be proved before sale) and when there is glut, to gather all the merchandise in one place for a regulated sale, during which time no other goods may be sold. Transport, particularly land transport, was difficult, and only here was private enterprise encouraged in any way.

Could all this administrative routine have been the fantasy of some idle theorist? What of technical terms like *akṣapaṭala* for exchequer? Each state granary and storehouse must have a standard raingauge (*A.* 2.5) for land is classified and its yield estimated according to rainfall (*A.* 2.24). This is the only instance I know of so practical a step being mentioned in any Indian text; Plato's Republic could do nicely with religious or philosophical axioms, but such technical details imply working methods in actual use. When the treasury is in great difficulties (*A.* 5.2) and a capital levy has to be made, the merchants in precious articles should pay as much as 50 per cent, cloth and lower metals 40 per cent, grain traders and wagon-train organizers 30 per cent and so on. In later Indian history, this would simply be done by force, as often as it pleased the absolute monarch. But Kauṭalya warns that this levy is not to be made twice, and that it should be on a voluntary basis as it were, by the chief collector of revenues begging from the people. He suggests seeding the populace with pseudo-volunteers who come forward enthusiastically to contribute apparently large amounts. Yet there is no question of civil rights, fair play, or from each according to his means—let the goldsmiths have all their property confiscated, the richest travelling merchants be quietly murdered as if by a robber or enemy, and the loot piled into the state treasury. It would be inconceivable for a Brahmin theorist to recommend as does the *Arthaśāstra*, confiscation of temple treasures (by the corresponding *adhyakṣa*, naturally!), setting up of new cults, faking of sudden miracles, all to collect money from the credulous for the king, not for the Brahmin. Here we have support from Patañjali who reports: *Mauryair hiraṇyārthibhir arcāḥ prakalpitāḥ* (on Pan. 5.3.99), that the Mauryans had established cults for the sake of money. That the Mauryan treasury had actually been in difficulties again and again is shown by progressive debasement of the coinage, which in the later Taxila hoard (dated to about the reign of Aśoka by a mint-condition coin of Diodotos) contains from

60 to 75 per cent copper, as against the 25 per cent recommended by the *Arthaśāstra* (*A.* 2.12). Even when Kauṭalya speaks against Bharadvāja (*A.* 5.6) to the effect that the minister shouldn't make himself king if the ruler dies suddenly and a good chance offers, he is being practical on moral grounds. Bharadvāja's advice was followed when the Śuṅga army commander Puṣyamitra ended the Mauryan dynasty; again, when the Kāṇvāyana Brahmin minister Vāsudeva succeeded the last Śuṅga. It may be a mere coincidence that Śuṅga and Kāṇvāyana are both Bharadvāja gotras.

After all, what is the main purpose of this treatise on political economy? The conquest and guarding of the whole earth[16] by one king. The work begins with those words, *pṛthivyāṃ lābhe pālane ca*. From the seventh book onwards, this purpose becomes the main aim, and the thirteenth deals with the most difficult task of straightforward aggression, the reduction of fortified places and cities. But even though no treachery down to murder and poisoning is too foul to get rid of the opposing king, the countryside is to be preserved from all damage, as Megasthenes noted to the astonishment and joy of writers like Diodorus; cutting off forage and perhaps damaging some crops is a desperate measure for the most extreme cases (*A.* 13.4). It is towards building up the resources for conquest that the whole cumbrous mechanism of the state is directed unscrupulously. An accurate permanent census, Domesday Book account, and register is to be kept at all times of everything and everyone as was noted by Megasthenes: boundaries, wealth taxed and untaxed; males, females, children, servants in each household and their work, if any; the purpose and duration of each voyage undertaken by anyone (*A.* 2.35, 36) both in city and countryside. To this end, there are not only registrars (*gopa*) for every ten to forty houses in the city, five to ten villages in the country, but a system of passes at city gates and a whole army of spies in disguise. These last are distinct from the informers (*sūcaka*) who discover embezzlement (*A.* 2.8). Spying is the only check upon officials, says Kauṭalya (*A.* 2.9). Apart from embezzlement, the official who neglects any chance of making revenue for the king, by inattention to the reports of underlings and spies, is to be fined, though collecting more than the amount due is frowned upon. Whoever diminishes the revenue eats up the king's wealth (*A.* 2.9), which he must make good, with a fine if his intentions were evil; whoever doubles (or more) the king's revenue eats up the land, but is let off with a warning if the whole amount be deposited into the treasury. There is no question of refund, in spite of book-keeping and regular receipts. Similarly for all the special taxes on merchants based on the theory that every one of them cheats on all possible occasions in spite of regulations, checking of balances and measures, and other state control including spies with every caravan (*A.* 2.21); but the taxes go to the king. Even in selling a plot of land, or a holding—which may be bought by relatives, neighbours, creditors in that order, and only in their absence by anyone else (*A.* 3.9), forty other people are invited to be present and to bid up the price; the excess over the predetermined price goes to the treasury along with the sales tax!

This system would become intolerably oppressive except when in a state of expansion, and even then expansion into paying territory. A complete scale of payment for every conceivable state servant is set down in *A.* 5.3. The highest is 48,000 paṇas (per year) for the great ministers, royal priest, dowager queen-mother, chief queen, and crown-prince. It descends to 60 for the lowest categories, of stablemen, camp-servants, and drudges for heavy unskilled labour, *viṣṭi.*[17] Dunn (loc. cit., pp. 3, 54) writing in 1936 when wages in Singhbhum had fallen to a miserable 7 annas a day still felt that the obvious and very thorough working of the same mineral deposits in very ancient times could only have been by 'an inexhaustible supply of cheap lahour—slave labour.' Unfortunately for this piece of imperial British yearning, the *śaila-khanaka* was paid from 500 to 1000 paṇas; the scarcity of metals, great demand, state monopoly, possible payment to the head of a whole family of workers, might be the explanation; but the *Arthaśāstra* miner was free. As for the level of prices, Megasthenes reported that the soldiers and their families lived very well; the *Arthaśāstra* pay for a soldier is only 500 paṇas, though more for veterans, with graded cash bounties on the field of battle (*A.* 10.3). The spy in disguise gets 1,000, the ordinary spy 500, intermediary 250; spying must have been very well worth the while. There is even a system of pensions for the dependents of those who die in service, and of gratuities. It is incredible that this scheme of cash payments, unparalleled in a country where feudal tenure is not yet forgotten, should be purely imaginary or designed for a mere *janapada* king. A characteristic suggestion at the end of *A.* 5.3 is that spies disguised as merchants and sutlers should sell to the soldiers in camp at double rates, thus clearing off the king's goods as well as recovering the money paid out in salaries. The best proof of reality is the advice that *villages should not be given away*, that only a poor king should give land, raw materials, or cattle rather than cash. Contrast Pasenadi's giving whole villages[18] to his priests; the *Arthaśāstra* gift is merely the trifling *brahmadeya* lands (*A* 3.10) and groves (*A.* 2.1; *M.* 99) though the author is himself a Brahmin. The ruler is to spend only a quarter of his revenues for all such cash payments; when we recall the statement of Megasthenes that a single camp of Candragupta held 400,000 men (*M.* 68), the total revenue in cash must have been enormous though the budget is nowhere given.

Yet the Mauryans changed none of the pre-existing local forms, as in the *rāṣṭra*; a conquered king (and therefore his officials) are to be retained in office (*A.* 7.16). Thus the chief benefit of conquest would come not from direct tribute but rather from promotion of trade, and settling of new lands; the latter is given as one of the main objects of policy in *A.* 7.11–12, with the advice, strange when coming from a Brahmin, that the land predominantly settled by men of the lowest caste is best. That the southern trade routes were richer than the Himalayan in all goods except wool, hides, and horses, is explicitly noted (*A.* 7.12), against the older tradition.

But how far could this go when the territory of a thousand *yojanas* from the Himalayas to the seas, the *cakravarti-kṣetram* (*A.* 9.1) had actually been brought under a single ruler? The new lands did not compare in fertility to the alluvial plains of the U.P. and the Punjab; and settling them would not only be difficult, but far less paying in proportion to the expenses of administration. The strong rule of one man, which had seemed so desirable with the ancient warring principalities and tribal areas of three centuries earlier, would now be oppressive beyond measure to the merchant, who is treated as a super-criminal in the *Arthaśāstra*, with virtually no civil rights; yet the merchant would naturally tend to gather in a progressively greater share of the currency.

The *Arthaśāstra* is remarkably deficient in one respect, namely detailed knowledge of ascetic sects—though spies are very frequently disguised as holy men, a custom observed down to the Gosains of the Peshwas. The solitary mention of Buddhists is in *A.* 3.20: Śākya, Ājīvakas, and such other monks as recruit from the lowest castes may not be fed at a feast to the gods or the manes, on pain of a 100—paṇa fine. The passage is taken by J.J. Meyer and others as a commentary on the Yajñavalkya smṛti 2.235–7, (*śūdrapravrajitānāṃ ca daive pitrye ca bhojakaḥ . . . śatadaṇḍabhāk*) which gives no details of sects; nevertheless, the smṛti as we now have it is later than the *Arthaśāstra*, for the paṇa there (1.365) is of copper, as against the silver paṇa of Kauṭilya, which dates it to a much later period of debasement. Now the term *śākya* for Buddhists is early, for even the *Harivaṃśa* qualifies it: *śākya-buddhopajīvinaḥ*. Ājīvaka denotes a follower of Makkhali Gosāla, who resembled the Jains in their nakedness, and the Buddhists in many of their opinions, being hated by both; they were a firmly rooted Magadhan sect, though they too spread to the far south and survived very late.[19] I suggest that this passage dates the *Arthaśāstra* (in essence) to the later years of Candragupta's reign. A pre-Mauryan date is highly unlikely, because of the reference to Saurāṣṭra, debased coins, cults established for gathering money, etc. Aśoka's conversion to Buddhism, respect for all sects, gift of three caves in the Barābar hills to the Ājīvakas (followed by three more by Daśaratha in the Nāgarjunī hills) exclude the possibility of so late a date.[20] In the *Arthaśāstra* the Jains are not mentioned (though they occur as Niganṭhas in *R.* 13) simply because their shift to the south must have taken place before this, (presumably in the face of local Magadhan competition) not later than the great migration under Bhadrabāhu; incidentally, this implies that the south had been penetrated by Magadhan traders before the armies marched there, so that the classical routine of imperialism: traders, missionaries, armies, is well established even in so long a past. Then there is the Jain tradition of Candragupta himself (*Tiloyapaṇṇatti* 71) having been converted, to die in the faith. So, this passage is impossible for the later Mauryans, say after Bindusāra; we may recall that the Aśokan district officer *rajjuka* is not mentioned in the *Arthaśāstra*, which has, however, a *rajju* tax. It is even further out of place for the Kuṣāṇas, the Sātavāhanas, and the Guptas, all of whom preserved and increased the great Buddhist foundations. Even the Śuṅgas, supposedly hostile to the religion, dedicated structures at Sāñcī. On the other hand, for a real persecutor like Śaśāṅka, such a ban would be much too mild, for the advice would then be to exterminate the heretics. Kauṭalya knows nothing of monasteries like Nālandā, saying merely that (*A.* 3.16) ascetics should live together without mutual contact, in places set apart; earlier comers are to make room for the later, on pain of ejection. Any ascetic is punished in full for serious crimes, fined for lesser offences; if unpropertied he may pay the fine by specially painful prayers or fasts for the king, which implies merely that he was not to work them off as a prisoner or slave.

Aśoka's conversion is not only a cause but even more a symptom of decline of the *Arthaśāstra*[21] system, which was *inadequate to maintain a stable empire*. After conversion of the emperor, it would no longer be possible to keep the monks out of the villages, and indeed Aśoka found a far greater use for the monks than spying: they were an integral part of his new system of administration, by conversion of the people to gentler way, by new relations between king and subject which must correspond quite well to new relations of production. The final move towards feudalism of a priest-ridden type is obvious only from the *Manusmṛti*, but an immediate change is also to be discerned in Aśoka's edicts. Though

Aśoka had suppressed two revolts at Taxila as viceroy (*Divyāvadāna* 19), the bloody Kaliṅga campaign was the final turning point (*R.* 13). Thereafter the army was obsolete; he is proud of using it for spectacles and religious processions only, not for war (*R.* 4). There should be no further killing of animals (*R.* 1), though criminals are still to be executed—with a special grace of three days after the sentence (P. 4). The king makes a new departure in administrative routine by travelling constantly, and visiting all classes of his people, particularly the Brahmins and ascetics; by making gifts directly to the aged and needy, instructing and examining his subjects in morality (*R.* 8). He honours all sects (*R.* 12), but means thereby that the essential principles of all should be followed. This is more than a fashion with him, for new officials, the Dhaṃma-mahāmātas now appear (*R.* 5), who are occupied with the morality of the whole population, the welfare of all prisoners, adjustment of schisms and controversies—all matters that didn't concern the *Arthaśāstra*. The church, therefore, is an adjunct of the state, a method of reducing the expensive mechanism of violence. Moreover, all royal officials are to take their own five-year tours of inspection (*R.* 3), which again implies lesser number of spies. The king does worry about administration, for he expressly says that he will hear reports at all hours however late, and in all places, no matter how private (*R.* 6); that he should thus 'discharge his debt to all living creatures,' is a new and inspiring ideal of kingship. Whether he changed the former attitude to the traders is not explicitly stated; he recommends minimum expenditure, and collection of as little goods as possible (*R.* 3: *apavyayatā apabhāṃḍatā sādhu*). Nevertheless, it is clear that the trader finds his relations with the state entirely changed. Though Ujjain and Taxila have their own viceroys (Dhauli 1), the greatest monuments of his and succeeding reigns are not there, but on trade route junctions such as at Sāñcī, or Kārlī in the Deccan. The trader comes forward to contribute his share voluntarily, alongside that of the king, to the Saṃgha; the caves at Kārlī, at Kaṇherī, and elsewhere are often cooperative enterprises in which each contributes what he can of his own free will. This would not be possible unless the trader had benefited, and in addition found some reason to like the state—as the *Arthaśāstra* state could not be liked. Certainly, the king's opening up of new territory by *dhaṃmavijaya*, planting useful and medicinal trees, building rest-houses, digging wells, and repairing roads far beyond his own frontiers was effective in spreading his influence where his arms had not reached. This would be of double benefit to the trader, and we have noted that Buddhism, Jainism, and such Magadhan religions are specially attractive to the traders; even though the king still reveres the Brahmins, as does the trader, they now have a far better meeting ground in religion which was absent in Brahmin ritual with its exaggeration of caste differences. Aśoka's conversion served as a measure of democracy, bringing the king nearer to the people, making him accessible to public opinion without the expensive, dubious intermediacy of spies. In the earlier stages, the religion of ascetic celibate almsmen was more economic than Brahminism with its costly anti-social multiplicity of sacrifices and endless fees for everything. Thus, except among the Yonas, where indeed men were not attached to any (Indian) sect or religion (*R.* 13), the Aśokan policy had immense success. Even then invaders like Menander and the Kuṣāṇas found it expedient to be converts, so that the success was really greater than Aśoka claimed. His empire fell apart because it was no longer economic nor even necessary. The country had been united, and settled in a new path of development for which a strong centralized mechanism of violence was not essential. It is a reasonable guess that the end of the empire was caused, or marked, by local officials turning into feudal landholders, in what had been the *sītā*. On the other hand, Buddhism spread to other lands as an adjunct to unity and auxiliary of the state mechanism in Ceylon, Burma, China; in Tibet, and much later Mongolia, it replaces the state mechanism altogether. This is not the original Buddhism of fifth-century Magadha, but its continuity of function in new forms adapted to new types of society is striking. Conquest to the natural frontier, poor transport, vast distances made it inevitable that the absolute central administration should be replaced by a dispersed feudal structure, both in India and China. In India, however, Buddhism staved off the feudal period till the change from the sītā to the rāṣṭra was completed; in China the new religion was welcomed even by the warring feudal landowners, to promote internal peace. In both places, it performed the minor economic task of returning to circulation—in the construction of pious works—the wealth accumulated by prince, landlord, and merchant.

Espionage is necessarily directed against enemies of the state, whether they be foes from without or internal class-enemies that threaten the state which is itself the manifestation of some particular class. The universal espionage of the *Arthaśāstra* state proves that its essence, the king, had virtually no friends; it was not at that period the tool of any important class though warrior and trader profited during expansion; the old tribal basis for kingship had vanished. The Aśokan change found such friends for the king and for his state. It also found new forms of expression in architecture and sculpture, for which the technique came from woodworking, the themes from popular legends, and the taste perhaps from Aśoka's holiday spectacles. The court poet (or for that matter any professional secular poet) is not mentioned in the *Arthaśāstra*, nor apparently in Pāli literature; the change made it possible for him to come into existence. Just as the new Magadhan religions had been developed by members of a class in decay, Kṣatriyas of the older free tribes, the new literature at its brightest (in the Gupta period) would develop from Brahmin myths, in the Brahmin langauge, by Brahmin writers. This means that the older priesthood also had to undergo a change when there arose a new type of kingship, based upon private ownership rather than state enterprise and monopoly.

NOTES

1. Whenever no direct reference is given (to save space), the ultimate source will be found quoted and discussed in G.P. Malalasekara's *Dictionary of Pāli Names* (2 vol., London 1938); *CAI* = Cambridge Ancient History of India, vol. I, *Ancient India*, ed. E.J. Rapson, Cambridge 1922. I have generally neglected Jain sources, of which a review can be found in J.C. Jain's thesis *Life in Ancient India* (Bombay 1947). Though *CAI* gives a clear, charming and sympathetic but at the same time superficial picture of Indian society, it brings Buddha's death down to 483 BC whereas tradition puts it 60 years earlier and this tradition is accepted by Vincent Smith in the *Oxford History of India* (2nd ed. S.M. Edwards, Oxford 1922). For primary sources, I have used the Pāli Text Society's editions for *DN.* = Dīgha-Nikāya, *MN.* = Majjhima-Nikāya, *Jat.* = Jātaka, *DhA.* = Dhammapada Aṭṭhakathā. Citations are by sutta and story number. Jātaka translations by J. Dutoit (in German) and *DhA.* by Burlingame (Harvard Oriental Series 28–30) were most useful in finding references quickly. But for analysis of Buddhist sources, I can only acknowledge my great debt to my father, who first pointed out the economic basis of *ahiṃsā* before 1912; his *Bhagavān Buddha* (in Marathi, Nagpur 1940) still contains some of the best published critique of the sources, and the second chapter of the first volume gives the best discussion I know of the 16 traditional kingdoms of the *Aṅguttara-Nikāya*, showing that most of them had ceased to have any independent existence or political importance by the time of the Buddha. For Brahmin sources, the most used is F.E. Pargiter's *DKA.* = *The Purāṇa Text of the Dynasties of the Kali Age*; the same author's name is used in citing his rather optimistic rationalization of very late, dubious, and not yet critically edited sources: *Ancient Indian Historical Tradition.*

   A refers to the *Arthaśāstra*, for which I usually follow T. Ganapati Sastri's text and commentary. Aśoka's edicts in Hultzsch's edition are referred to as *R.* for the rock-cut and P. for the pillar texts, by number.
2. I take Aryan as denoting at this period some special tribal organizations and their derivatives, linked together by affinities of language, ritual, a common aggressive mode of patriarchal life; there is no question of racial purity, though original racial differences as well as later pride in purity of lineage must be admitted. In

Pāli *ayyo* is used as synonymous for free man as against a dāsa, acquiring gradually the same value as 'mister'. J.J. Meyer in translating *A* 3.13 does not know this meaning of *Ārya-prāṇa*, 'living as a free man'.

3. This would be proved by the story of Bhaddiya, Vinaya Piṭaka, Cullavagga 7.
4. The reading in *nicchivi* or *nicchavi*, a known variant for Licchavi as seen from Malalasekara *sub*-Licchavi.
5. She is taken as mother of his son, murderer, and successor Ajātaśatru, who is called Vedehīputto (*DN.* 2), son of Vedehī or of the Videha princess. But Videha is not the home of the Licchavis, who were based upon Vaiśāli, the modern Basarh and Raja Bisal Ka Garh near Muzaffarpur. The *Śatapatha Brāhmaṇa* i.4.1.17 makes both Videhas and Kosalas descendants of Videgha Māthava. Bimbisāra's chief queen is called Kosaladevī. The aṭṭhakathās explain *vedehīputta* as 'son of a learned woman' which, though unconvincing, shows that the accepted Buddhist tradition makes Ajātaśatru's mother a Kosalan. Cellaṇā, whether she bore Ajātaśatru or not, would still count as his mother, along with all the other wives of king Bimbisāra, according to the older rule.
6. The Caṇḍālas and heretical ascetics are to dwell beyond the cemetery and burning grounds, outside a city, according to *A.* 2.4. The low status of Caṇḍāla and the often synonymous *śvapāka* seems to derive from their eating dogs, which to the Iranian branch of the Aryans at least would make them as unclean as cannibals.
7. Mahāvagga 1.63 shows that Nāgas could not join the order, and this exclusion has left its mark on the Buddhist initiation ceremony in the form of a question, 'are you a human being?', meaning thereby that the novice should not be a *nāga*.
8. The word 'nigama' sometimes translated as suburb seems rather to mean tribal settlement in a new territory, an act of pioneering perhaps in the ancient Greek or Roman sense of 'colony'. The Sakyan *nigama* where Pasenadi is supposed to have had his last meeting with the Buddha was at a distance of three *yojanas* from the nearest city, so that the meaning of suburb cannot apply here.
9. The *śreṇī* in *A.* 7.11 and elsewhere seems to mean an association of settlers, who also bore arms; and could be dangerous if provoked beyond endurance. Thus *seṇiya* may mean leader of a śreṇī; other seṇiyas are known, such as the naked ascetic of *MN.* 57, who lived like a dog.
10. I have shown in the *ABORI* 37, 1952, pp. 53–60 that the Sanskritization of the name as Varṣakāra cannot be correct. One should take it as *vaśyakāra*, he who wins over, a nickname after his great feat.
11. However, *A.* 9.1 seems to imply the possibility of a campaign in the rains, so that the old rules were abandoned in practice, by the time of the Mauryans, perhaps following the Greek example, or because the increasingly great distances made it necessary.
12. Text fragments collected by E.A. Schwanbeck, Bonn 1846; for Diodorus Siculus and Arrian text and Latin translation by Carl Müller, Paris (Firmin Didot) 1878. The English translation by J.W. McCrindle, Calcutta 1926 (reprinted from the *Indian Antiquary* 1876–77) is cited as *M.* with page number. The two *Kauṭalīya—Studien* of E. Breloer (Bonn 1926, 1928) are useless.
13. The *Arthaśāstra* has a corresponding word, *dvipada* = biped, grouped with the

catuṣpada (Greek *tetrapodon*) as two-legged and four-legged animals for sale (*A.* 3.15). There is no doubt that *some* human beings were sold, as the context shows this to refer to humans, not poultry. But the main consideration is that they were unimportant as a source of labour, and *A.* 3.13 shows mainly contract labourers whose rights are carefully protected, though they are *dāsas*.

14. Dionysus, in Megasthenes, does not indicate the Indian Śiva as so many have assumed without consideration, but obviously the conqueror Indra of the *Ṛgveda*, who is so often invited to fill himself will Soma. The three-peaked mountain (*M.* 162) seems to be a development of Trikakud in the Triśiras Tvāṣṭra saga. Spatembas would be, in the most reasonable Sanskrit equivalence, Aśvatthāman, one of the seven immortals in later legend though his role in the *Mahābhārata* is not of first rank. The Greek envoy, therefore, gives a better report of Indian tradition than his translators.
15. Ganapati Sastri, in his learned preface, insists that the *gotra* is Kauṭalya, from Kuṭala, the change to Kauṭilya being indicative of the reputation for Machiavellian crookedness ascribed to the author. However, the gotra Kuṭala, Kauṭalya, Caṇaka or Cāṇakya is not found in any surviving list (unless one sees some connection with the Caṇakarāja-nīti in the Tibetan Canon), whereas Kauṭilya survives in several such lists, and families actually belonging to that gotra exist, as for example among the Mādhyandina Brahmins of Maharastra. Nevertheless Kauṭalya is the uniform reading of the twelfth-century Patan MSS in Muni Jinavijayaji's printed but unpublished edition.
16. The world outside India does not count for imperial purposes: *deśaḥ pṛthivī, tasyāṃ, himavat samudrāntaram udīcīnāṃ yojana-sahasra-parimāṇaṃ tiryak cakravarti-kṣetram* (*A.* 9.1).
17. There is the usual ambiguity, caused here by the ending of the long compound:- *viṣṭi-bandhaka*. Shamasastry takes this as one unit, to mean the press-gang foreman, but then the pay of 60 paṇas a year would be disproportionately low, in comparison to the rest. Ganapati Sastri's interpretation of viṣṭi and bandhaka as two separate categories is proved by two definitions of viṣṭi: *A.* 10.4 gives the camp-viṣṭi, whose work is to clear the camp, roads, wells, fords, etc., carry fodder, take the offensive and defensive weapons to and from the battlefield, and carry away the wounded—work which would be difficult to entrust to unpaid forced labour, which is Shamasastry's idea of viṣṭi. In *A.* 2.15, we have the viṣṭi for the great royal storehouses, consisting of porters, the weightsmen, and so on. Here the category ends—*dāsa-karmakaravargaś ca viṣṭiḥ*, which is generally taken to include both slaves (bondsmen) and ordinary labourers. It follows that even slaves were paid for such heavy labour; presumably, the money would count, as in *A.* 3.13, towards their ransom and eventual freedom.

18 This may tally with the comparatively poor Kosalan coinage, and with the *Lalita vistara*'s otherwise incomprehensible remark that the Kosala royal family was *na cāparimita-ratna-nidhi-samutthitam*. In any case the Magadhans rapidly became by far the richer state, by holding the metals, the trade routes, and the river.

19 In this connection, see A.L. Basham's authoritative and comprehensive work: *History and Doctrines of the Ajivikas*, London (Luzac) 1951.

20 The *Arthaśāstra* is supposed to be dated to the end of the third century BC or later by its reference to Chinese silk: *A.* 2.11, *cīnapaṭṭa, cīnabhūmija*. The name China extends to the whole country from the principality of Ts'in after the final victory of Ts'in over Chu and the coronation of Shih Huang Ti as first emperor about 223 BC. This argument, however, is completely irrelevant for *cīna* in *A* 2.11 denotes the source from which India actually derived the silk at that time; nothing is said about 'the whole of China'. Any modern history of China (cf. W. Eberhard *A History of China*, trans. E.W. Dickes, London 1950; chps iii–v) will show the great importance of Ts'in from the eighth century onwards. Not only did it straddle the trade route to the west and India, but its rise to supreme power is due to its having ended feudalism before the rest of China, which in turn is due precisely to the local development of a strong merchant class. A merchant became chief minister under the first emperor, scandalising the feudal nobility. For us, the point is proved by *A.* 2.11 itself, where occurs the only other mention of China in the whole book: *cīnasī*, a fur imported from Balkh; this shows both the trade route and the paramount importance of Ts'in in trade.

21 Aśoka suppressed the *samāja* by edict (*R.* 1). This appears in *A.* 1.21 as some sort of saturnalia; in *A.* 2.21, it meant freedom to drink for three days. In *A.* 5.2, it provides occasion for some royal spy in disguise as a merchant to allow himself to be 'robbed', so as to swell the treasury with a real merchant's goods; at the end of *A.* 10.1 the *samāja* is forbidden altogether in the army. This is one of the few direct contacts between the *Arthaśāstra* and Aśoka. The taxes remitted in the Rummindei edict occur in the rāṣṭra list.

13

The Line of *Arthaśāstra* Teachers*

The problem to which this note may make some contribution is to trace the origin of statecraft in ancient India. This naturally implies some knowledge of the historical origins of the state. That the Indus valley civilization had one or more states seems taken for granted. The *Ṛgveda* has nothing that one might call a state in any modern sense. The *Yajurveda* presents at most a few small tribal kingdoms,[1] probably with elective chiefs; but no absolute monarchy over settled agrarian territory. The early Vedic society, predominantly pastoral and tribal, could not develop a state mechanism comparable to that in the later stage based upon fully developed agriculture. But extensive land-clearing for general plough agriculture, which means the availability of iron on a large scale, could not have existed in India before about 800 BC. Anything earlier does not fit our case, or was lost with the ruin of the Indus culture.

The oldest surviving Indian book on statecraft is the *Arthaśāstra* of *Kauṭalya*.[2] I take it to be a document of about 300 BC,[3] based upon older tradition and transmitted in a text which may lack perhaps a fifth of the original content.[4] It often surveys the opinion of earlier masters, especially when the author differs from them. The reference is sometimes to an entire school, as that of Manu, Āmbhī, and so on.A school may be meant even when a single individual, the founder, is named. The undifferentiated group of previous teachers is at times cited *en masse* simply as *ityācāryāḥ*—on a rough count, on some fifty-five different occasions in twenty-seven out of a total of 150 chapters. There was obviously a whole body of well-established theory on statecraft from which Kauṭalya drew a good many general principles and some detailed advice. The earlier books vanished, rendered obsolete not merely by the success of the *Arthaśāstra* but the obsolescence of their form of society. In fact, the *Arthaśāstra* itself barely managed to survive, in very few manuscripts rediscovered early in this century. This neglect was due precisely to the passing of the *Arthaśāstra* society beyond comprehension of later scholars. Earlier works, based upon an even more archaic social structure, would have correspondingly less chances of survival.

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On the other hand, it has been argued that the whole of the *Arthaśāstra* is a forgery of about AD 300. Then the so-called traditional schools might conceivably have been invented by the same cunning mind that dreamed up all the rest of the work. The earlier teachers need have had no existence except in the powerful imagination of this writer. If, therefore, the historical existence of one or more of these teachers be proved and localized in time and place, that would be a solid contribution to the *Arthaśāstra*. Apart from this, the intrinsic value of any such identification would be considerable in a country almost totally devoid of ancient historical sources. We proceed to make one definite identification.

1. *Long Cārāyaṇa*

In this section, I show that one person barely named by the *Arthaśāstra* was minister of the last two Kosalan kings, during and after the Buddha's final years. The tradition could not have been generally known to others than well-read Buddhists, or a narrow circle of Magadhan statemen. The Kosalan kingdom was absorbed by Magadha within fifteen years of the Buddha's death.

The most interesting passage for our purpose is at the end of *Arthaśāstra*, 5.5. Here are cryptic sayings of seven ministers who discovered that they were losing royal favour. The discoveries were, to judge from the earlier context, made from the most trifling indication in each case. The quotations are:

> 'He pours from a height': thus (said) Kātyāyana.
> 'The crane marched off widdershins': Kaṇiṅka Bhāradvāja.
> 'Grass': Dīrgha-Cārāyaṇa.
> 'The robe (was)chill': Ghoṭamukha.
> 'The elephant sprayed back': Kiñjalka.
> 'He praised (only) the chariot-horse': Piśuna.
> 'By the contrary barking of the dog': son of Piśuna.

There is unusual doubt in interpretation of the text. In the paragraph that precedes, Cāṇakya described normal signs of approaching disfavour that could be seen in the king's behaviour and that of his retinue. The passage ends with: 'He (the minister) should look into changes of attitude even of those not human'. This is sometimes taken in conjunction with the seven quotations above, which follow immediately. But clearly, the robe and grass are not beasts. Whoever splashed Kātyāyana by pouring too high could only have been a featherless biped of a servant. These sayings were meant to illsutrate the entire chapter. Moreover, such brief reference would have been completely wasted unless the original context of each saying were known to contemporary readers. These readers were not the general public, nor even curious literati. The *Arthaśāstra* was meant for specialists. The alchemical witchcraft of the fourteenth book shows that the entire work was a secret discipline. The passage in *Arthaśāstra*, 5.5, must be compared with other places in the *Arthaśāstra* where better known but legendary or mythological figures are mentioned as examples to the point. The rugged prose of the *Arthaśāstra* never wastes a word. It is incredible that a late forger should have inserted a passage like this which no one could possibly understand. The explanatory tales of our commentators here are remarkably silly, even for the egregious company of Indian scholiasts.

Of these seven worthies, Piśuna is cited in four other places: *Arthaśāstra*, 1.8, to the effect that ministers should be chosen by the king solely on grounds of merit; *Arthaśāstra*, 1.15, the king should consult only such of his ministers as are technically competent for the particular question; *Arthaśāstra*, 1.17, an overambitious prince should be detained under guard in a fortress or other strong place rather than exiled to some outlying district where he might win over to his cause the army detachments posted on the frontiers; *Arthaśāstra*, 8.1, weak finances would be more serious a defect for any kingdom than weak fortifications. It follows that Piśuna was a theorist of statecraft as well as a minister of considerable standing in some earlier kingdom. He was presumably joined or followed in office by his son. Their remarks, 'He praised the chariot-horse', and 'By the dog's snarl', must refer to incidents which marked their impending fall from grace.

The guess is reasonable that all the rest in the *Arthaśāstra*, 5.5, sequence were actually theorists and ministers like Piśuna. The one name that is really well attested by other records is of 'Long' (*dīrgha*) Cārāyaṇa. The name Cārāyaṇa (without Long) is given in the eleventh poem of Kṣemendra's *Avadānakalpalatā*. The story concerns the fall of King Prasenajit of Kosala. The narrative is given in fuller detail in a much older Pali Buddhist source, the preamble to *Jātaka* 465. It is repeated in almost identical terms to the *Jātaka* version in the commentary on *Dhammapada* 47 (com. 4.3). In both the later cases, the name is given as *Dīgha-Kārāyaṇa* and then a few lines later simply as Kārāyaṇa. There can be no doubt as to the *dīgha-dīrgha* equivalence. Kārāyaṇa may be equated to Cārāyaṇa not only from Kṣemendra's version but also from the Prayag pillar edict of Aśoka. In speaking of his second queen's donations, the great emperor refers to her as 'Kāluvāki, mother of Tīvala'. The boy's name is obviously the Sanskrit Tīvara. The lady should be Cāruvācī, 'sweet-spoken', equivalent to the Greek Euphonê, in Sanskrit.

The story of Long Kārāyaṇa is that he was high minister and keeper of the regalia to Prasenajit (Pasenadi), king of Kosala at the time of the Buddha. Kārāyaṇa's maternal uncle Bandhula, a Malla, held high command in the Kosalan army and was treacherously murdered at the king's orders on the suspicion of wanting to usurp royal power. The nephew continued in his own ministerial office. When Prasenajit, in his eightieth year, called on the Buddha at a refuge near the village of Ulumpā or Metalumpa, the royal insignia were laid aside (as a mark of respect), in Kārāyaṇa's keeping. These would be the fan, crown, canopy (or royal parasol), sword and sandals—all out of place in a hermitage. Kārāyaṇa took the opportunity to invest Pasenadi's son Viḍūḍabha with the regalia and to proclaim him king. Viḍūḍabha had already been made commander-in-chief of the Kosalan army by his doting father. So, there remained nothing for the old monarch except flight. Pasenadi died outside the gates of Rajgir, closed for the night, while trying to gain the protection of his nephew and son-in-law Ajātaśatru, king of Magadha. The eighty-ninth *sutta* of the *Majjhima Nikāya* shows Pasenadi giving orders to Dīgha-Kārāyaṇa (again named both with and without the *dīgha*) to prepare for the disastrous final visit to the Buddha. The story was not a pure *Jātaka* invention.

As Mallians, Bandhula and Dīgha-Kārāyaṇa were kṣatriyas. They could have had no direct influence upon Brahmin tradition. The Purāṇas do not even mention Viḍūḍabha as the last Kosalan ruler. After Pasenadi, most Purāṇas insert Siddhārtha and Rāhula in the Ikṣvāku king-list, though neither had ever ruled anything beyond his own body and soul. That Cāṇakya was a Brahmin is beyond question. He could have known of this incident only because of its importance to the history of Magadha. Kosala fell to Ajātaśatru, the only candidate with clear title and a good army to enforce it, after Viḍūḍabha had been swept away with his entire army camp during the night by a flash flood of the river Acirāvati (Rāptī). Thereafter, Kosala had no separate existence as a kingdom. The Brahmins retained some memory of Prasenajit because he was the last northern king to give away whole villages in fee to his priests after the old-fashioned *yajña* sacrifices. The Buddhists remembered both the father and the son for excellent reasons. Pasenadi was a generous friend to the Buddha and to the Order, while Viḍūḍabha massacred the entire Śākyan tribe. There can be no question of Cāṇakya having been influenced by the Buddhists. *Arthaśāstra*, 3.20, prescribes the fine of hundred pieces of silver for anyone inviting Buddhist monks (labelled Śākyas), Ājīvikas or the like to a feast for the manes of departed ancestors. There is no other mention of Buddhists or Ājīvikas in the rest of the work. *Arthaśāstra*, 2.1, forbids entry into crown villages for proselytizing *parivrājakas* who might draw peasants off the land into the supposedly easier but unproductive life of an almsman. No ban of the sort could have been enforced from the time of Aśoka till after Harṣa.

To recapitulate, Kārāyaṇa, with the special nickname 'Long', was minister to the last two kings of Kosala. The Buddha died soon after Pasenadi, in a year dated as 483 BC by one chronology and sixty years earlier by another. Kārāyaṇa was necessarily a Kṣatriya like his uncle Bandhula; both had taken service outside the powerful Malla tribal nation. The *gotra* is not found in Brahmin lists, in any case. It follows that many of the *purvācāryas* mentioned in the opening line of the preamble to the *Arthaśāstra* were of the warrior caste. This would be logical for any early work on statecraft. The brief quote from Cārāyaṇa-Kārāyaṇa is perhaps to be interpreted as: '(even a bit of) chaff (is enough to show which way the wind blows)'. Presumably, the remark was made when the minister was convinced that Pasenadi meant to dispatch the nephew like the uncle; and then took steps to get rid of the king first. Taking the whole story so clearly for granted would not have been possible at a very late date, especially for an author so clearly antipathetic to *śramaṇas*. The argument is all for the traditional early date for the *Arthaśāstra*.

The names Cārāyaṇa and Ghoṭa(ka)mukha are found in the *Kāmasūtra* of Mallanāga Vātsyāyana. As no other Cārāyaṇa is known, it is tempting to identify this *ācārya* with Kauṭalya's in *Arthaśāstra*, 5.5, and therefore with the minister of Pasenadi. We are told by *Kāmasūtra*, 1.1.12, that Cārāyaṇa had a separate treatise upon which the first section of the *Kāmasūtra* was later based. Making due allowance for Vātsyāyana's special editing, there is nothing in *Kāmasūtra*, 1, that could not fit properly into an *Arthaśāstra*. Cārāyaṇa is quoted by name in *Kāmasūtra*, 1.4.20 and 1.5.22. It is well known that the *Kāmasūtra* is modelled closely and consciously upon the *Arthaśāstra*. I do not recall seeing it suggested that this may very well be due (at least in part) to the same source-book having been used by both. This would account for *Kāmasūtra*, 1.2.44, being identically stated in *Arthaśāstra*, 1.6 (the case of the chieftain Dāṇḍakya who was lost, along with his kin and tribe, for lusting after a Brahmin's daughter).

At the risk of wandering far afield, Ghoṭa(ka)mukha, who occurs nowhere in the *Arthaśāstra* except at 5.5, must also be considered here. The *gotra* is given among the Viśvāmitras by the Bodleian *pariśiṣṭa* to the White *Yajurveda*. Vātsyāyana credits Ghoṭa(ka)mukha with the source-book for the whole of *Kāmasūtra*, 3, and cites him in *Kāmasūtra*, 1.1.14, 1.5.24, 3.1.3, 3.1.10 and perhaps elsewhere. To what extent Vātsyāyana modified Cārāyaṇa and Ghot(ka)mukha in his own presentation is not clear; but Cārāyaṇa's precepts, at least as reported in the *Kāmasūtra*, are of a more general nature than would be expected in a treatise on erotics. It is not without interest that Ghoṭamukha, in Kauṭalya's precise form, is also known as Brahmin *gotra* name to Buddhist sources. The ninety-fourth *sutta* of the *Majjhima Nikāya* bears the title Ghoṭamukha, who is there given a discourse by Udena, after the Buddha's *nirvāṇa*. This Ghoṭamukha constructed an assembly hall at Patna for the Buddhist almsmen, which bore his name and still existed at the time the *sutta* was written down, as we are explicitly told. The connection of the Ghoṭamukha clan of Brahmins with Pāṭaliputra (Magadhan capital at the time of Kauṭalya) is significant. Ethnographers would recognize a split totem 'horse-face' in the clan name, parallel to Sātakaṇi, which can be derived from *sapti-karṇa*,[5] 'horse-ear'. Philologists will be pleased at this exceptionally early use of *ghoṭa*, from which modern Indian langauges derive their word for horse, rather than from the older Aryan *aśva*. It is also significant that Jain lists put Kauṭalya and Ghoṭamukha together.

2. *Bhāradvāja*

Of the seven named in the passage from *Arthaśāstra*, 5.5, two others occur nowhere else, namely Kiñjalka and Kātyāyana. The presumption is that the first was a Kṣatriya minister, the second a Brahmin. The first two in the list of seven are in fact Brahmins so that the remaining five, including Piśuna, should be kṣatriyas with Dīrgha-Cārāyaṇa. The order is natural, if the author of the *Arthaśāstra* were a Brahmin. One more of these seven, Kaṇiṅka Bhāradvāja, had a greater share of historical reality than acknowledged hitherto.

Kaṇiṅka is too extraordinary a personal name to have been invented. Without the nasal, which would be doubtful in MSS as a stray *anusvāra*, it might mean rice-flour, or something pulverized. I suggest that this sage is precisely Kaliṅga Bhāradvāja, the wise minister of *Jātaka* 479. He may even have been the Brahmin of unspecified name and gotra sent in *Jātaka* 276 to learn righteous behaviour from the Kurus. Naturally, the identification of Kaṇiṅka with Kaliṅga has to be duly motivated.

This Bhāradvāja is given as a Bodhisattva, a pre-incarnation of the Buddha on his way to perfect enlightenment. Therefore, the *Jātaka* story must be placed earlier than the Buddha by whatever tradition was its source. But Kaliṅga had not developed into a kingdom before the Buddha's day. The supposed capital Dantapura in the story received its name from a tooth relic of the Buddha himself. Aśoka's famous edict makes it clear that at the time of the conquest Kaliṅga had not even a king worth naming. That earlier Mauryan emperors had not taken it implies that it had become worth a military campaign only at the time of Aśoka. The use of the name Kaliṅga might have been natural for the southerners who preserved the *Jātaka* tradition before it was reconverted into a Pali text; but it cannot have been genuine and conceals some unfamiliar name.

Kaṇiṅka, as is well known, turns up in the *Mahābhārata* as the Bhāradvāja who gave some crooked advice on statecraft. The original insertion in the *Ādiparvan* was shown by the late V.S. Sukthankar to be interpolated. But much the same *Kaṇiṅkanīti* which appeared in 1.140 of the old Bombay *Mahābhārata* edition is duly repeated in the critical text of the *Śāntiparvan*. Only, instead of appearing at the Kuru court on the eve of war, this Kaṇiṅka Bhāradvāja held a dialogue with a mythical King Śatruṃtapa. The advice was repeated by dying Bhīṣma in *Mahābhārata*, 12.138.3–70. Both *Kaṇiṅkanītis* have common content, some identical stanzas, but enough differences to show that they need not be copies of a single document. Bhāradvāja's influence on the *Mahābhārata* proper can be proved even apart from this special passage. A Bhāradvāja (without the epithet) is quoted by *Arthaśāstra*, 12.1, as the source of the advice that a king should yield to one stronger (than himself). The words are: *indrasya hi sa praṇamati yo balīyase namati*: '(The king) who bends to a stronger verily bows (as it were) to (the god) Indra'. This comes out of Bhīṣma's mouth in good *anuṣṭup* metre in *Mahābhārata*, 12.67.11: *indrāya sa praṇamate namate yo baliyase*. Bhāradvāja is not named as author of the verse; but there is no doubt as to the identity of the two utterances. The implication is that there existed a treatise by Bhāradvāja, whether Kaṇiṅka or not, in somewhat archaic prose, which might have been differently versified for the two different *Mahābhārata* insertions and have otherwise influenced the epic. In the *Arthaśāstra* the Bhāradvāja maxims can be ascribed to an entire school.

The identification of Kaliṅga with Kaṇiṅka can be made even stronger. In *Mahābhārata*, 6.10.67[a], the Ātreyas and Bhāradvājas come jointly and very surprisingly in a list of barbarous tribal peoples. Both are Brahmin *gotras*, but it needs only a look at other extant *gotra* names to see that many of the clans derive from tribes and are even totemistic in origin. What we have to say about the Bhṛgus later on will support this even better. The tribes named in the passage are all from the remote north-west frontier, with one possible exception. This is precisely the Kaliṅgas. However, the *Mahābhārata* reading Kaliṅga has so many variants that there was obviously some unfamiliar word which was modified in different ways and finally reduced to a familiar name—exactly as was done by the *Jātakas*.

It is clear that a Bhāradvāja, specifically Kaṇiṅka Bhāradvāja, had considerable reputation as a historic minister and writer on statecraft. His treatise or his school has left its mark on both the *Arthaśāstra* and the epic. Though he may appear rather a shady character in the *Mahābhārata*, he must have had a high name to be made a previous incarnation of the Buddha, a Bodhisattva. The cryptic utterance *pravavrāja krauñco'-pasavyam* in *Arthaśāstra*, 5.5, ascribed to Kaṇiṅka Bhāradvāja is easy to explain. Some translators take the *pravavrāja* with the preceding quotation, to mean 'thus Kātyāyana left', and then extend it to all the other six, who likewise left court. Inasmuch as Dīgha-Kārāyaṇa forced the king off the throne rather than leave, this cannot be right. The meaning is generally taken to be that a crane, perhaps a tame bird in the royal park, flew the wrong way; this was an ill omen, or a deliberate warning to the wise minister. Actually, the *krauñca* can only be the tactical army formation specifically ascribed to the still more ancient statesman Bṛhaspati (*Mahābhārata*, 5.46.39, 40). Such a basic formation (without the name *krauñca*, however) is given as Bṛhaspati's by *Arthaśāstra*, 10.6. It is carefully described, as with penetrating front, extended wings and long tail-like reserves. This supplies a reasonable identification of *krauñca* without the need to rationalize. The *Arthaśāstra*, 5.5, quotation should therefore mean: 'The army on parade drill marched off in contrary order (to the accepted)': thus (remarked) Kaṇiṅka Bhāradvāja. Presumably it showed some change in the king's mind. The minister should have been consulted or informed in advance; that he had not been taken into the king's confidence meant that royal inclinations had quietly veered towards other advisers.

The remaining Bhāradvāja citations in the *Arthaśāstra* might as well be reviewed here. *Arthaśāstra*, 1.8, is in favour of the newly crowned king's choosing his councillors afresh from boyhood associate. *Arthaśāstra*, 1.15, enjoins the king to make his final decisions alone and in secret, not with his ministers in council. *Arthaśāstra*, 1.17, wishes the prince to be kept in custody by the king, his father, right from birth, for, like crabs, a king's sons too are patrophagous. The longest and most surprising Bhāradvāja quotation is in *Arthaśāstra*, 5.6: 'The minister should seize the vacant throne for himself, if possible, on the king's death. Let him set the princes and the leading nobles against each other, getting rid of the survivors in clandestine fashion. So good a chance that offers itself should not be wasted'. Note that Cāṇakya considers this advice dispassionately, as usual, and votes against it with sound reasoning. In *Arthaśāstra*, 8.1, Bhāradvāja considered the king's personal vices less harmful to the state than the shortcomings of his ministers. In *Arthaśāstra*, 8.3, love of pleasure by a king was found a greater evil than hot temper. Bhāradvāja and his school were clear opportunists, distrustful and hardly to be trusted. Moreover, they show us a developed state mechanism, an absolute monarchy very far from elective tribal chieftainship.

It seems unprofitable to set down the complete list of sayings of named *ācāryas* like Kauṇapadanta and Vātavyādhi who cannot be traced to any source outside the *Arthaśāstra*, and who may be found by the curious in any index to the *Arthaśāstra* or to its translations. We turn to the interesting problem raised, namely the relationship of the *Arthaśāstra* to the *Mahābhārata*.

3. *The Arthaśāstra and the Mahābhārata*

It is known that Kauṭalya's great work influenced the supposedly ancient smṛtis.[6] It will be shown in this section that the *Mahābhārata* has special contacts with the *Arthaśāstra* and with later works on the subject. There must have existed before the present *Mahābhārata* (critical) text some book on statecraft closer to the *Nītisāra* of *Kāmandaka* than to the *Arthaśāstra*. A sage Kāmanda (v.1 Kāmandaka) advises King Aṅgāriṣṭha at the end of the *Mahābhārata*, 12.123.

Apart from maxims scattered thinly throughout the epic, the main advice on statecraft comes in the rather late twelfth canto. It is given by the venerable hero Bhīṣma on his death-bed and is notably at variance with his own irreproachably chivalrous conduct in battle and in the council of state. The epic character who gives very practical but undeniably crooked advice at critical moments to win the fight for his side is the god Kṛṣṇa. Yet we find the god preaching the *Bhagavadgītā* while Bhīṣma who lost so consistently teaches methods of statecraft which would have led him and his people to victory. There must have been some teaching associated with the name of Bhīṣma. T. Ganapati Sastri suggested that Āmbhī is another name for Bhīṣma who, as son of the river Gaṅgā, was born of the waters. An Āmbhī is quoted in *Arthaśāstra*, 1.17, where he stresses the need to guard against the crown-prince's ambition by keeping the heir to the throne under careful watch. This was a problem of considerable importance in the first monarchies, not in earlier tribal kingdoms where simple ostracism would suffice. Viḍūḍabha and Ajātaśatru are conspicuous historical examples of successful usurpation by a prince of his father's crown. Presumably, a person who could be identified with Bhīṣma without difficulty gave his name to some work on the theory of statecraft, though nothing more can be said about this.

The most significant passages are *Mahābhārata*, 12.58.1–3 and 12.59.33–74. Taken together, they suffice to prove the pre-existence of a book on *rājanīti* intimately connected with the teaching of Kauṭalya, but further developed. The first of these two runs:

Bhīṣma said—This, O Yudhiṣṭhira, is for thy purpose the very cream of royal duties. Nor does the Lord (*bhagavān*) Bṛhaspati praise any other duty (for a king). The Lord Viśālākṣa, the most austere Kāvya (Uśanas), great Indra of the Thousand Eyes, and also Manu Prācetasa, the Lord Bhāradvāja, and Gauraśiras the sage, all *Brahmā*-kenners and explainers of the *Brahman*, were exponents of the kingly science (*rājaśāstrapraṇetārah*).

The line of descent is particularly interesting. The last of these names, Gauraśiras, is found only in one other place (*Mahābhārata*, 2.7.9^{d}) in a meaningless list of highly respected characters who wait upon Indra in heaven; nothing else is known of him in the whole of Sanskrit literature. The great god Indra is not in the line of *Arthaśāstra* teachers; nor is Viśālākṣa (cited half a dozen times by the *Arthaśāstra* on different topics) equated to the god Śiva by Kauṭalya, as is done by the epic and its commentators.

Kauṭalya threw away a good chance here, if ever it was open to him. The *Kāmasūtra* (1.1.5–10) starts off with claims of a divine tradition for itself. The original book was 'written on all three sections of *dharma, artha, kāma* by Creator Prajāpati (Brahmā) in one lakh chapters. One section thereof on *dharma* was separated by Manu Svāyambhuva. Bṛhaspati (separated) the science of material gain (*arthaśāstra*); Nandī, follower of Mahādeva, propounded the *Kāmasūtra* separately in a thousand chapters. Thereafter, Śvetaketu, son of Uddālaka, condensed the book on erotics into five hundred chapters. Then Bābhravya the Pañcāla reduced it to one hundred and fifty chapters divided into seven sections'. Vātsyāyana goes on to state that these seven sections were further separately promulgated by different masters, of whom we have mentioned Cārāyaṇa and Ghoṭa(ka)mukha. The present *Kāmasūtra* was condensed as a unitary recombination from these seven different treatises.

Kauṭalya says nothing of the kind in his own introduction. He only mentions, in passing, the existence of books by former masters of polity which he had consulted and gathered together. No attempt is made to trace the *Arthaśāstra* to the high gods or to famous semi-divine sages of antiquity. A name like Bṛhaspati is cited without any special mark of respect. Oftener than not, Cāṇakya deals with these earlier masters in summary fashion when his own sharp logic demands a refutation. This should leave no doubt as to the early date of the *Arthaśāstra*. One could even suggest that an early redaction of the *Mahābhārata* contained the idea deriving all three sciences of ethics, economics and erotics from god-given books. This *Mahābhārata* would have come between Cāṇakya and Vātsyāyana in time. Cāṇakya himself was much too well known to history to be inserted by name into the *Mahābhārata*, which claimed remote antiquity.

Mahābhārata, 12.59.86–91, brings us even closer to the line of *Arthaśāstra* teachers. We are told, regardless of the preceding account, that the science propounded by Grandsire Brahmā was first mastered by none less than Śiva-Viśālākṣa, who reduced it from one lakh to ten thousand *adhyāyas* for a degenerate age. This particular recension was, according to the *Mahābhārata*, called the *Vaiśālākṣa*, valuable testimony that a Viśālākṣa treatise which had existed for Cāṇakya as a text had become legendary by the time of the *Mahābhārata*. 'Puraṃdara (Indra) then reduced it to five thousand; therefore it was then called the *Bāhudantaka*'. Now it is remarkable that a Bāhudantīputra is found (just once) in *Arthaśāstra*, 1.8. The identification with Indra is a *Mahābhārata* attempt to elevate the line to divine authors; there is nothing known in Indra's saga to justify the equation to Bāhudanta. It could mean, however, that Bāhudantīputra was a kṣatriya; he gave the excellent advice, which Cāṇakya views with high approval, that royal councillors should be selected purely on grounds of merit. The next abridgement given by the *Mahābhārata* is credited to Bṛhaspati (three thousand chapters), the *Bārhaspatya*. The final version was by Kāvya Uśanas in one thousand *adhyāyas*.

We are told at the start of this succession that when the Vedas had disappeared from this world, the gods begged their wisest, Brahmā, to produce a working substitute. His treatise in one lakh chapters dealt with four sciences: *dharma, artha, kāma, mokṣa*. The fourth is salvation, with which the *Mahābhārata* was greatly concerned, but which the *Arthaśāstra* and the *Kāmasūtra* ignore completely. We seem to have in the *Mahābhārata* passage the mythical treatise (without *mokṣa* which implies a further *Mahābhārata* redaction) from which the *Kāmasūtra* attempts to trace its descent. But when one comes to the final list of contents as the *Mahābhārata* gives it, *dharma* and *kāma* have also been discarded. What is left is pure *artha*. There are far too many technical terms in common with the *Arthaśāstra* to be ascribed to coincidence: *trayī cānvīkṣikī caiva vārtā*, then *daṇḍanitī, cāra, yātrākāla*, and so on. There is no way now of tracing the exposition and the treatment followed. There must have been the heavy emphasis upon ethics that Kāmandaka and the still later *Nītivākyāmṛta* of Somadeva Sūri thrust into their treatises. But the relationship remains undeniable. If the *Mahābhārata* description of the treatise be faithful to its text, then the supposed divine work on statecraft differed also from Kāmandaka's, though both omit the all-important methods (*Arthaśāstra*, 21). Cāṇakya prescribed for settling virgin and waste lands. Obviously, their lands had already been settled more or less completely. The great problem facing the earlier Magadhan state no longer existed for *Mahābhārata*, 12, nor Kāmandaka.

The order proposed here, *Arthaśāstra, Mahābhārata, Kāmasūtra*, Kāmandaka, Somadeva, is bound to be contested by those who retain their faith in the antiquity of the epic, unshaken by common sense or modern scholarship. It is obvious at a glance that the manifold inconsistencies put into the mouth of Bhīṣma derive from the *Mahābhārata* making an ancient hero say things that fitted a type of society much later even than Kauṭalya's. First, the insistence upon Brahmins and Brahminism which runs so large in *Mahābhārata*, 12, as in the rest of the work, or even more, is completely absent in the *Arthaśāstra*. Yet the author of the *Arthaśāstra* was indisputably a Brahmin. Bhīṣma decries the burning down of forests as a major sin (*Mahābhārata*, 12.35.7, 31). Nevertheless in his own lifetime, he calmly witnessed the famous holocaust of Khāṇḍava forest by the Pāṇḍavas with the aid of the god Kṛṣṇa. This cleared the land for the new capital Indraprastha. Land-clearing by fire was standard Aryan procedure in Vedic times. Even the *Śatapatha Brāhmaṇa* (1.4.1.14–6) shows that land-clearing by fire remained till the seventh-sixth century BC the normal method, visualized as a great sacrifice to Agni. No properly initiated Brahmin of early times could have characterized this technique of clearing jungle as sinful. On the other hand, Aśoka's fifth pillar edict forbids such burning down of forests. The obvious reason is that the best lands had already been cleared for agriculture. Burning down such forest as remained would have been dangerous to cultivation as well as wasteful. Thirdly, the *Mahābhārata* as a war story should naturally pay special attention to military formation and tactics, rather than concentrate upon individual prowess and heroic duels on the field of battle. Yet the *Mahābhārata* terms which give the component units of any army corps (*akṣauhiṇī*) are demonstrably later than in the *Arthaśāstra*. Cāṇakya uses *patti* to mean a hoplite, a heavy-armed infantryman of the line; it means a squad of combined arms in the *Mahābhārata*. *Gulma* in the *Arthaśāstra* is simply a wharf; a composite army company in the *Mahābhārata*, especially to be used for garrison duty (12.69.6–7) to occupy fortresses, cities, suburbs and strong places after the enemy's capitulation. So far as I know, the earliest use of *gulma* as an army company for local garrison or police work comes with the Sātavāhanas.[7] The *Arthaśāstra* has a comprehensive table for cash payments to every servant of the state, from the high minister to the lowest drudge. *Mahābhārata*, 12.88.6–8, is well on the way to feudalism (like the *Manusmṛti*) in assigning a portion of the revenues as stipend for the administrators. The governor's share would amount to a whole town's taxes, if he administered a thousand villages; for subordinates, in proportion. The possibility of the *Mahābhārata* coming after the *Arthaśāstra* in time is not in doubt.

4. *Cāṇakya's contribution*

Nothing is reliably known of Kauṭalya himself beyond the strong tradition that he was minister of Candragupta Maurya and retired from office during the reign of Bindusāra. The much later (Gupta period?) drama *Mudrārākṣasa* makes our author into the *éminence grise* who set Candragupta upon the throne of the Nandas. The *Kathāsaritsāgara* fable is even more childish. I propose to show that Cāṇakya-Viṣṇugupta was probably a Bhārgava and as such inherited a special tradition. The Bhṛgu clan also had profound influence upon the redaction of the *Mahābhārata*.[8] It then becomes possible to estimate just what portion of the *Arthaśāstra* is Kauṭalya's own, based upon practices of the Magadhan state.

Four preceptors often quoted in the *Arthaśāstra* are: Uśanas, Bṛhaspati, Manu and Parāśara. Generally, each is taken by the *Arthaśāstra* to indicate a school: *iti Mānavaḥ*, and so on. The Auśanasas have five citations, the last being a repetition in *Arthaśāstra*, 15.2, of *Arthaśāstra*, 1.15. The others receive (in order) six, five and six citations respectively.

The name Parāśara is famous in Brahmin legend from the *Ṛgveda* (7.18.21) down. It still heads a large section of the Vasiṣtha group of Brahmin clans. Besides appearing as the reputed author today of numerous (doubtless apocryphal) scriptural works, Parāśara is also a key figure in the *Mahābhārata*. He begot the immortal Kṛṣṇa-Dvaipāyana Vyāsa (*Mahābhārata*, 1.57.48–57) upon Satyavatī-Matsyagandhā. Vyāsa, of course, is the supposed author of the entire *Mahābhārata* and turns up at times to participate in the events in person. He is also credited with the authorship of the Purāṇas and was later elevated to be writer of the Vedas, Veda-Vyāsa. No sense of shame attaches to Parāśara's passing seduction on the Yamunā though the *ṛṣi* was under vow of celibacy and the maid who attracted him the literally stinking daughter of a fisherman. It may be suggested parenthetically that the story could have passed muster only because a Parāśara was connected in some way with the Vedic and quite historical but soon extinct Matsya tribe, which would logically have a fish totem. Satyavatī conveniently regained her virginity but lost the fish-smell and was given to the Kuru prince Śāṃtanu in marriage. A Parāśara turns up again among the Nāgas consumed by Janamejaya's fire-sacrifice (*Mahābhārata*, 1.52.17); the name is about the only one without variants in the list of Nāgas so destroyed. However, all Vasiṣthas, including their founder (*RV*. 7.33), have a rather suspicious origin, un-Aryan in appearance.

The other three are on a somewhat different footing. Two stanzas are quoted as from Uśanas in *Mahābhārata*, 12.56.29–30, on the proper behaviour for a king. Uśanas advises in *Mahābhārata*, 9.57.13, against charging an enemy broken off the battlefield who has rallied again for a desperate last stand. This is identical in content, and has phrases in common, with the anonymous tag verse at the end of *Arthaśāstra*, 10.3. Two other *gāthās* by this sage (*Mahābhārata*, 12.137.67–8) are general advice against carrying feuds to an extreme. But who was Uśanas to say all this? In the *Mahābhārata*, as in general Brahmin tradition, Uśanas is also called Kavi, Kāvya, Śukra. He was preceptor to the Asuras, who were made invincible in their battles with the gods till Kaca stole the revivifying magic (*Mahābhārata*, 1.71–9). Śukra was father of Devayānī, who married King Yayāti in spite of caste, her father's close association with

Asuras, and an earlier love affair with Kaca. She was mother of Yadu and Turvasu, eponymous ancestors of two of the famous Vedic Five Tribes (*pañcajanāḥ*). These two were historical people who dropped out of the general line of development and out of Brahmin tradition for a very simple reason: they did not develop caste within the tribe nor patronize Brahmins. The Yadus later made a partial recovery (after their extinction in a civil war) in myth as the pastoral tribe of Kṛṣṇa and Balarāma. Śukra was also adviser to the noble and generous demon King Bali, in Purāṇic myth. Yet, for all his varied appearance, his *gotra* and Brahminism remain beyond doubt; he was a Bhārgava and is often referred to simply by that clan name.

Though Kauṭalya does not say which Manu founded the Mānava school of statecraft, the *Mahābhārata* context shows this *ācārya* to have been the Manu Prācetasa whom Bhīṣma placed in the line of transmission between Indra and Bhāradvāja. The father Pracetas is taken by Purāṇic sources to be a Bhṛgu, though a Pracetas Āṅgirasa is given as the traditional seer of *Ṛgveda*, 10.64. *Mahābhārata*, 12.57.44–5, quotes Manu Prācetasa to the general effect that no man should work at a trade other than his own. Bṛhaspati also goes back to the oldest Veda, without the variety of names for Uśanas; he normally counts as son of Aṅgiras, and father of Bhāradvāja. Uśanas and Bṛhaspati are linked together as master tacticians and strategists by *Mahābhārata*, 8.26.49. Yudhiṣṭhira's army was drawn up in battle formation at Kurukṣetra according to the rules of Bṛhaspati and Uśanas. Bṛhaspati's *śāstra* is given as the source of *Mahābhārata*, 12.56.39–40 and 12.57.7. Indra himself quotes Bṛhaspati in *Mahābhārata*, 12.140.17[ab]. The *ṛṣi*'s advice to the war-god is given in *Mahābhārata*, 6.103.5. Bṛhaspati is proclaimed chief of those divine sages who mastered the *rājanīti* (*Mahābhārata*, 12.38.9), while the very next stanza says that Uśanas taught the science.

Consider this extraordinary situation. Bṛhaspati, leader of the gods, is coupled with Uśanas of the many names, adviser to demons. Both were Brahmins who left standard works not only on statecraft but also on warfare. Cāṇakya gives us an entirely different picture of these sages. At the very beginning of the *Arthaśāstra* (1.2), we find the Mānavas reducing philosophic theory to a branch of the three Vedas, as any good Brahmin should. Then Bṛhaspati's school declares that only two sciences exist: production on the land (*vārtā*) and punitive rule (*daṇḍanīti*), the Vedas being pure camouflage for a man who has mastered practical materialism (*lokayātrā*). The school of Uśanas takes the final plunge: there is just the one science, *daṇḍanīti*. This is synonymous with 'the science of government', literally the Law of the Big Stick. Tribal society meant rule of chief or oligarchic council by consensus of all the tribe; Uśanas says bluntly that everything reduces to *daṇḍanīti*, as indeed happened with absolute monarchies and any society based upon private property. The statements by these 'great sages' are not cynicism but a sad reality.

Ṛgvedic Bhṛgu cracks the *Mahābhārata-Purāṇa* image of these saintly *ṛṣis* whose lightest curse sufficed to topple kingdoms and knock the very gods out of heaven. Bhṛgu in *Ṛgveda*, 7.18.6, is one of the chiefs who fought against King Sudās in the Ten-Kings battle. After all primitive fashion, the same name is used both for tribe and chieftain. The Bhṛgu chariot receives high praise in *Ṛgveda*, 4.16.20; they made it especially for Indra. Five *Ṛgvedic* hymns show a Bhṛgu clan of seers; four others prove that the Bhṛgus were in special relationship to the fire-god Agni. In fact, they discovered fire-making, or generated Agni, whom they brought to mankind. This mastery of fine technique could account for the secondary meaning 'potter' of *bhārgava*, both in Sanskrit and Pali. The name Bhṛgu is derivable from 'Phrygian'. One may recall that the Paktyans mentioned by Herodotos on the Indus are also located by the same Greek historian in Armenia; the Paktyes are easily identified with the Pakthas of the Ten-Kings fight, on the same side as the Bhṛgus; and with the modern Pakthoons, though not among the Five-People. Bhṛgu-Phrygians could surely have ranged over as large a territory as the Pakthas. We have here not just a Brahmin *gotra* but a complete tribe with a full range of activities including warfare, pottery, and chariot manufacture.

The name Bhṛgvāṅgirasa for the *Atharvaveda* shows that the Bhṛgus and Āṅgirasas were closely related. This Veda is not counted with the first three by the *Arthaśāstra*, but its magic is recommended to rid the countryside of a plague when other means fail. Best of all, Kauṭilya (with the accepted wrong spelling) is found (with variants) in three lists as a Bhṛgu *gotra*; in two other lists also among the Gautamas, hence Āṅgirasa. Cāṇakya was heir to the Bhṛguid tradition which was based upon the tribe's historical activities in war and in the various crafts; it could logically contain works on statesmanship and military science. That the Bhṛgus survive only as a Brahmin *gotra* is a feature they share with so many other tribal names now to be found in the *gotra* rolls and nowhere else.

The Bhṛgu-Āṅgirasa lore was not all that Kauṭalya used. The *Itihāsa* (*itihāsaveda* in *Arthaśāstra*, 1.3, on a par with the *Atharvaveda*) is defined in *Arthaśāstra*, 1.5. It consists of *purāṇa*-ancient happenings, *itivṛtta*-chronicles, episodes, *udāharaṇa*-stories pointing a moral, plus *dharmaśāstra* and *arthaśāstra*. All these were especially prescribed for the young prince's study along with instruction in the handling of weapons, chariots, horses, elephants and men. Kauṭalya insists upon purely practical considerations with the words *artha eva pradhānaḥ* and follows them unhesitatingly throughout the whole of the *Arthaśāstra*; but he knew his history, as is evident from the Dīgha-Kārāyaṇa episode. He knew and stressed the philosophy of Indian materialists, *Lokāyata*, uniformly damned by Jains, Buddhists and Brahmins as unrighteous. The Lokāyatikas obviously had no complete work on statecraft, however useful their axioms might have been to Cāṇakya, or disagreeable to the successors who preferred *dharma*—as did Aśoka.

There is only one *ācārya* quotation in *Arthaśāstra*, 10 and 12, none in books 4, 6, 11, 12 and 13. Book 14 is a secret discipline for spell and enchantment where no predecessor is cited by name. Only a single *ācārya* citation is found in *Arthaśāstra*, 5, outside the seven in *Arthaśāstra*, 5.5. In Book 2, five of the seven references are crammed into a single chapter. This clustering shows that Cāṇakya drew upon many sources other than the treatises then in circulation.

One of these sources was Magadhan history. *Arthaśāstra*, 11, is a book consisting of a single chapter, perhaps shortened in transmission. It deals with methods for corrupting and subverting tribal organizations (*saṃgha*) from within. Armed intervention to break up the tribe into scattered families settled well away from each other in strange territory comes only as the last step. This is based upon clear historical precedent, namely the methods whereby Ajātaśatru's Brahmin minister softened up the Licchavis. He went over to them in simulated disgrace,[9] set the leading oligarchs against each other till the tribal assembly, council and juries for justice fell into desuetude, while combined drill of the whole tribe was no longer practised. Then Ajātaśatru was given the signal. Jain records, admiring the Licchavis as people of Mahāvīra (even more than did the Buddhists for their model tribal constitution), speak of hard battles lost by the Licchavis by cause of miraculous divine aid to the attacker. If the stories have any meaning, the Licchavis were attacked in separate groups and beaten by superior Magadhan ballistae and war engines. The Licchavis are named in the list of dangerous fighting *saṃghas* by *Arthaśāstra*, 11, presumably because their name and prestige still remained though tribal organizations had vanished. Eight centuries after Ajātaśatru, the Gupta ruler Candragupta I was proud to marry the Licchavi 'princess' Kumāradevī. Other tribes are named: Malla, Madra, Kuru, Pañcāla, and so on. The Mallas formed a confederacy with the Licchavis, broken completely by Ajātaśatru. The Kurus and Pañcālas were among many ancient free tribes extinguished by Mahāpadma Nanda[10] (the last great

Magadhan emperor before the Mauryas) perhaps just before Alexander's raid. The memory would still be fresh for the *Arthaśāstra*. In all these cases, no *ācārya* is cited, so that the source must have been recorded history, known to all, and methods actually used by the Magadhan statesmen. The Madras ranked high culturally at the time of the early Upaniṣads,[11] but as casteless barbarians in a later portion of the epic (*Mahābhārata*, 8.27.71–91; 30.9–81). They could not have been in contact with the Magadhans till Candragupta Maurya's conquest, nor were they important enough on the north-west frontier to be noted by Alexander's historians. Cāṇakya could have known them at first hands as a Brahmin of the frontier region himself.

What remains, especially the detailed methods of administration in *Arthaśāstra*, 2 (to be duplicated *janapada* by *janapada*), must also have been derived from actual Magadhan practice. Control of mining and metals, so fundamental in the *Arthaśāstra*, would have been plausible and highly paying only in Magadha. No other Indian state of antiquity was rich enough, according to the archaeological evidence of punch-marked coins, to follow the detailed pay schedule of *Arthaśāstra*, 5.3. The all-important methods of *Arthaśāstra*, 2.1, for settling virgin and waste lands, for clearing and bringing the jungle under the plough, date the entire work. They would not be necessary, nor even practicable after the best lands had been farmed for a generation or two under permanent settlement. It is precisely these conditions which changed rapidly with the climax of Magadhan power, which make the entire work of Cāṇakya seem so unreal today. The land had been cleared and settled. The fighting *saṃghas* were no longer a clear and present danger, however fresh their memory. The once powerful cash economy became unworkable because of great distances and shortage of currency metals, both of which made a centralized administration impossible. The profound social change is attested by Aśoka's edicts, which prove that the *Arthaśāstra* methods had become impracticable three generations after the composition of the book.

NOTES

1. Wilhelm Rau (*Staat und Gesellschaft in Alten Indien*, Wiesbaden, 1957) shows that the state mechanism was poorly developed even after the *Yajurveda*, in the *Brāhmaṇa* period.
2. For the *Arthaśāstra*, I have used the TSS edition of T. Ganapati Sastri and the Mysore University edition of 1960 by N.S. Venkatanathacharya. The name was first shown to be Kauṭalya by Ganapati Sastri. On any principle of text criticism, that would be the only possible form; the Patan Bhandar northern palm-leaf

fragment has Kauṭalya throughout, as do many southern MSS. The Mysore edition accepts this. R. P. Kangle in a text of the *Arthaśāstra* published by Bombay University in 1960 leaves out all variants of his preferred reading Kauṭilya, having explained in the preface that he knows better.

3. On the question of authenticity, now discussed threadbare, I may refer the reader to *An Introduction to the Study of Indian History* (Bombay, 1956), chapter 7.
4. 'The Text of the *Arthaśāstra*', *Journal of the American Oriental Society*, lxxviii, no. 3 (1958), 169–73.
5. 'Combined Methods in Indology', *Indo-Iranian Journal*, vi (1963), 177–209, devotes one section to the Sātakarṇi etymology. Cf. also 'The Basis of Ancient Indian History—I', *Journal of the American Oriental Society*, lxxv, no. 1 (1955), 41, fn. 9.
6. J.J. Meyer, *Uber das Wesen der altindischen Rechtsschriften* (Leipzig, 1927), shows in detail the priority of the *Arthaśāstra* to the smṛtis.
7. Actually, not the *gulma* but the *gumika* (*gaulmika*, company commander) at the time of Vāsiṣṭhīputra Puḷumāvi, V. S. Sukthankar in *Epigraphia Indica*, xiv, 153–5.
8. V.S. Sukthankar, 'The Bhṛgus and the Bhārata: A Text-Historical Study', *Annals of the Bhandarkar Oriental Research Institute*, xviii, 1–76.
9. For the derivation of the nickname Vassakāra from the Brahmin's feat, see 'The Sanskrit Equivalents of Two Pali Words', *Annals of the Bhandarkar Oriental Research Institute*, xxxii (1952), 53–60. Vassakāra is described as *Magadha-mahāmātya* in *Majjhima Nikāya*, 108. The story of his disrupting the Licchavis is given in the commentary on the *Mahāparinibbāṇasutta, Dīgha Nikāya*, 16; the softening up of the Licchavis is supposed to have taken three years of intrigue, some time after the Buddha's death. The Jain *sūtras* which give some account of the last battles with the Licchavis are the *Nirayavalikā*, the *Bhagavatī*, and the *Āvaśyaka Cūrṇi*, but I have had to rely on second-hand reports of these and on the *Abhidhānarājendra*. The ruin of the Licchavis took place some years after the Buddha's death.
10. F.E. Pargiter, *The Purāṇa Text of the Dynasties of the Kali Age* (Oxford, 1913), p. 25; the long list of old kṣatriya tribes wiped out by Mahāpadma precedes his name.
11. For Brahmin acolytes going to the Madra country to learn the Vedas and *yajña*, see *Bṛhadāraṇyaka Upaniṣad*, 3.3.1 and 3.7.1. But the change of status can be found even in the *Mahābhārata*, namely that Mādrī was purchased with due bride-price as second wife to Pāṇḍu by Bhīṣma, which surely means that the Madras once counted as the equals of the Kurus.

14

Kaṇiṣka and the Śaka Era*

The international conference held at the London School of Oriental & African Studies (20–22 April 1960) discussed all the evidence now at hand without reaching a generally accepted conclusion about the date of the Kuṣāṇa emperor Kaṇiṣka. Chairman Basham showed the delegates his own disappointment through lucid comment upon the inconclusive debates.[†] Nevertheless it seems to me that the conflicting opinions do point to a conclusion not presented at the conference. It is offered here as a suggestion to those who have the leisure and the capacity to work out a detailed argument for or against the hypothesis.

The accepted view that the Kaṇiṣka era of AD 78 is the fundamental Kuṣāṇa date received powerful support from Tolstov's report on the Soviet Khorezm excavations, and the radiocarbon dating of his finds. The numismatic evidence as presented by MacDowall and Gobl (particularly a coin of Sabina and the parallels between Roman and Kuṣāṇa coinage issues) would bring the date of Kaṇiṣka well down into the second century. This agrees with the view expressed by Barrell on grounds of iconography and sculpture, as well as Allchin's survey of archaeological material in what is now Pakistan. The data from the coins might be explained away separately detail by detail, but no single explanation other than the later date suffices for all the salient facts presented by the numismatists. However, the following identification would reconcile both these divergent points of view, and fit the evidence of the Chinese and Buddhist texts as well.

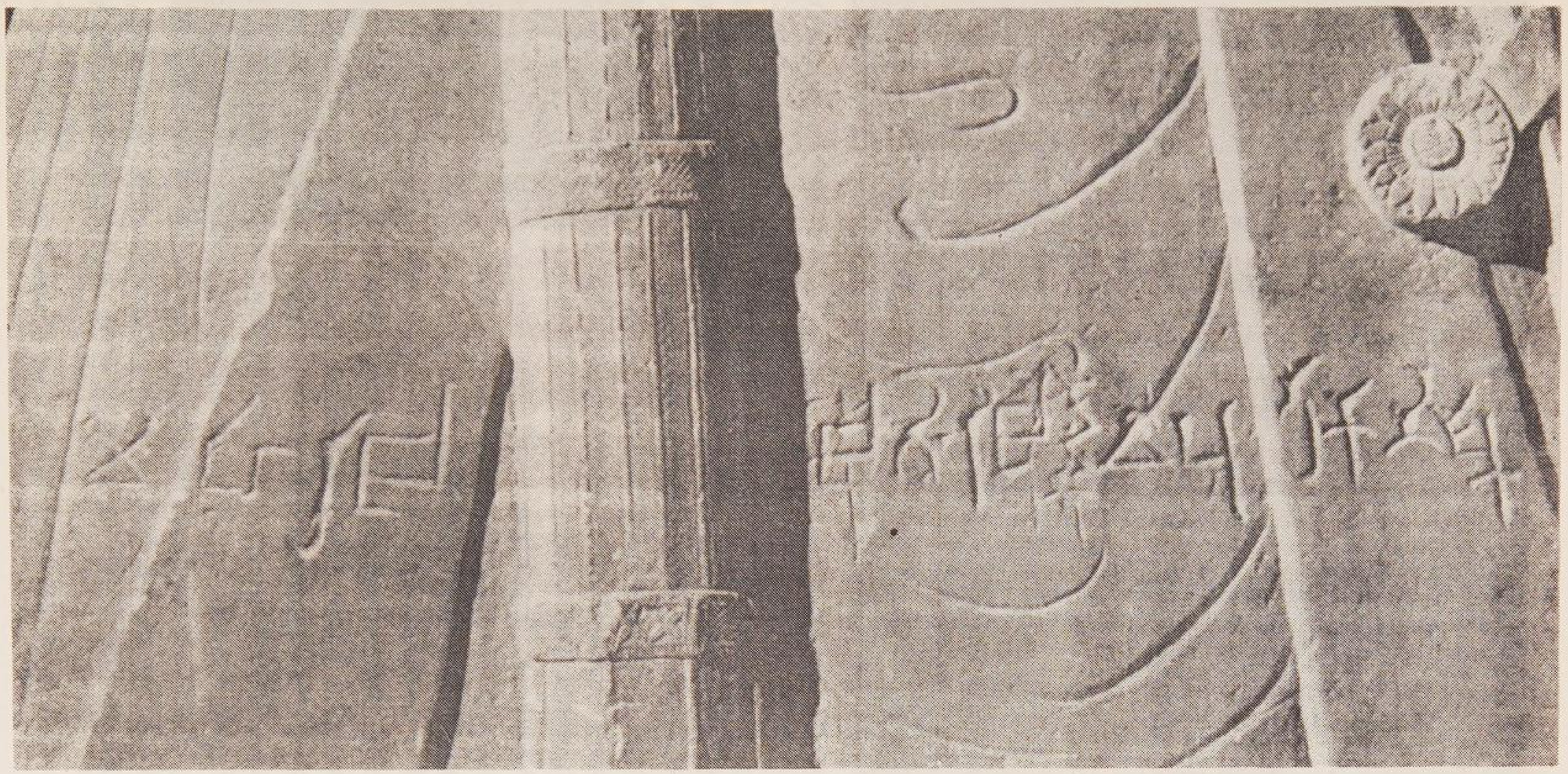
The Śaka era of 78 AD was founded by a Kaṇiṣka who struck coins only under the title of Soter Megas. The Kuṣāṇa emperor who styles himself Kaṇiṣka on the coins was Kaṇiṣka II.

Marg, vol. XV, no. 2 (March 1962), pp. 5–6.

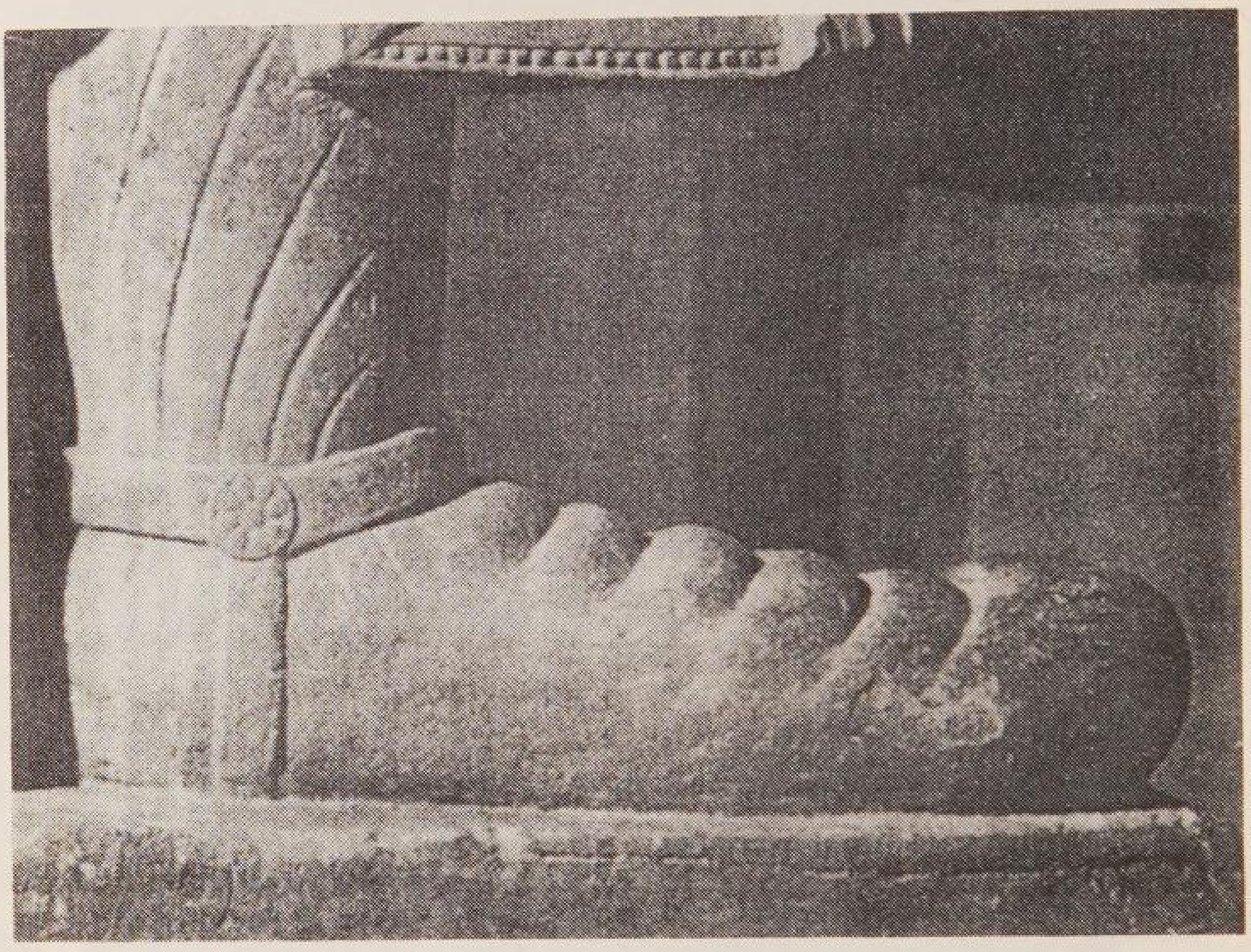
[†] [For papers presented at the conference see A.L. Basham, ed., Papers on the Date of Kaniksha, Leiden, 1968.]

There is no point in discussing the Ara inscription, the 'dropped hundreds' of some later epigraphs, the positon of the Kadphises, a possible grandfather–grandson relationship between the two Kaṇiṣkas, etc. Buddhist tradition can hardly be interpreted in logical fashion without two Kaṇiṣkas: the *dharma-mahārāja* would be Kaṇiṣka II. That other deities appear on the coinage besides the Teacher means only that no theological conflict between these cults or religions existed at the time. It was possible for king Harṣa to worship the Sun, Mahādeva, and the Buddha simultaneously with no sense of incompatibility. Soter Megas was certainly not the name of the king, who must nevertheless have had some personal name. No other *soter* or *basileos basileon* failed to add a personal name to these titles on any coin. The Soter Megas coins seem far too numerous for a mere *satrap* or *strategos*, while the explanation that they were struck by a whole succession of anonymous *strategoi* is ridiculous. The king in question took it for granted that everyone knew who he was, a lofty attitude not to be expected of an upstart, interloper, or any of the Kuṣāṇas except the first. This is the Aśokan imperial tradition, where a simple *Magadhe rājā or Devānaṃ piya Piyadasi* sufficed with the casual addition of the name Aśoka in two minor edicts at Maski and Gujarra.

H. Humbach's interpretation (*Die Kaṇiṣka-Inschrift von Surkh-Kotal*: Wiesbaden, 1960) of the hymn to a deified Kaṇiṣka, son of Kozgaska, has been contested by Henning and others. Nevertheless, the main features seem to me consistent and significant. The hero of the inscription is described as: Lord of the sacrificial fire. He who pours out the streams. He who bursts the canals (? dams). King of the intoxicating draught (? *soma*). Sovereign of the waters brought forth from the shattered rock, & *c*. These are precisely the Vedic attirbutes reserved for Indra. Humbach cannot have been prejudiced in this matter, because he takes the general bearing and tone of the inscription as neo-Mithraistic Iranian, and never once refers to Indra or the Vedas. The epigraph as it stands cannot be reconciled to contemporary Iranian religion, even when full allowance is made for the adjectives shifted to Ahura Mazda from the older god whom Zoroastrian reform had transformed into a *daeva* demon. The standard Kuṣāṇa title *daivaputra* (or *deva-putra*), though traced back to the imperial Chinese 'Son of Heaven', would be highly offensive in first century Iranian. The translators read this nevertheless into the *bago-pouros* in III-*c* of the Surkh-Kotal inscription. It would seem that we have the memorial to a hero who began life as a tribal chief in the more primitive tradition of the Aryan hinterland, but rose to the topmost heights of imperial power. That would account for the title and the anonymity of Soter



Part of the Kaṇiṣka colossus showing the inscription.



The heavy Kuṣāṇa riding boots turned sideways shows acceptance by the Kuṣāṇa of the three-dimensional technique of the Indian sculptor.

Megas: *trātā* qualifies several Vedic gods, but in the later period applied peculiarly to Indra. Succeeding Kuṣāṇas naturally adopted more fashionable and sophisticated cults. Their catholic taste shows that the deities indicated on their coins were all equally strange to the original clan tradition—which was not strong or popular enough to be imposed upon the whole empire.

The equation 'Soter Megas = Kaṇiṣka I' does not depend upon any special interpretation of the Surkh-Kotal inscription, and is offered here for what it may be worth. 'Kaṇiṣka II = Kaṇiṣka-of-the-coins' is a simple corollary.

The forceful hand of Emperor Kaṇiṣka holding the scabbard.

15

The Working Class in the *Amarakośa**

The *Nāma-liṅgānuśāsanam*[1] of Amarasiṃha is the oldest surviving complete dictionary of Sanskrit words in common use, and the most popular. The author cannot be placed as early as (the legendary) king Vikrama of 57 BC, for he mentions the coconut *nālikera* (2.4.168; without any of the byproducts, unless coir is concealed in the doubtful variant *śuma* for *śulba* of 2.10.27). The coconut tree was first extensively planted on the upper west coast between AD 71 and 121 not becoming well known in India for centuries afterwards. The pomegranate (*dāḍima*: 2.4.64; 3.5.42; perhaps 3.4.49), also cannot have been widely known at an early date, being of Persian origin, with logical spread during the Gupta period, or at any rate after the Sātavahanas. The *ghaṭiyantra* (2.10.27), some form of Persian wheel for irrigation, is not known to the *Arthaśāstra* in spite of its preoccupation with increasing land yield; it occurs at least twice in the early seventh-century *Harṣacarita* (p. 94, p. 104). On the other hand it is difficult to visualize the lexicon as being written much after the fifth century AD, seeing its long popularity and the Buddhistic beginning.

The classification of words seems haphazard to many, 'exceedingly imperfect and confused, especially in all that relates to abstract ideas or mental operations'.[2] At least the classes have not been retailed by other comparable word-collections like the *Viśva* and the *Medinī*, which do not directly copy Amara. None of the commentators, including Subhūticandra, Kṣīrasvāmin, Sarvānanda, Rāyamukuṭa, or the modern Maheśvara, seem to find anything special about the order. My point is that Amarasiṃha is mnemonically superior to his competitors precisely because he gave more attention to objective reality than to ideal categories, unlike the scholiasts who concentrate upon grammatical form and derivation.

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There is a *clear association of ideas, resulting in a hierarchical arrangement* not only by chapters but within the chapter; the words fall into natural groups in the most important cases. Even within the group, a similar ordering is to be noticed, allowing at all times for the exigencies of the simple metre. This will become obvious as we proceed, and will be used to deduce some reasonable conclusions about 2.10. Wherever practical matters are concerned (in the first two *kāṇḍas*), a word in the thesaurus may with advantage be studied as part of a sequence in its context, rather than by itself.

1. The *varga* sections of particular sociological interest are 2.7 to 2.10, labelled after the four classes of contemporary society as *brahma*, *kṣatriya*, *vaiśya*, and *śūdra*, in this accepted order. Varga 2.7 begins with a classification of the various professional types of Brahmins. Thereafter are given the *yajña* and *vrata* ritual terms. In 2.8 (the Kṣatriya), the beginning lists types of ruler and warrior, along with officials and functionaries at all levels of whom some like the harem eunuch (2.8.9) could not have been Kṣatriyas. Then come terms connected with the army, the penal administration of justice, tolls, dues, taxes. For the last, many of the technical terms of the copper plates or inscriptions are missing, though *bhāga-dheya* in 2.8.27 may denote the standard royal tribute rent of a sixth, *ṣaḍbhāga*; possibly, as Fa Hian reports, taxes were nominal in Bihar and U.P. of that period, so that the Kṣatriya would have less to collect than in later, properly feudal days. Thereafter come royal paraphernalia, classification of elephants, horses, soldiers, weapons, and means of warfare. Section 2.9 deals with the Vaiśya in parallel fashion. People of this class lived by agriculture, cattle breeding, trade (vāṇijya), money lending, as seen from the synonyms at the beginning. Types of fields are then classified by size and quality; farm tools, crops, utensils, food products for trade; cattle and other herd animals; terms of trade and money lending, including coinage, weights and measures; jewels, metals, spices, perfumes, waxes and such goods come at the end. The boat traders are given separately with two synonyms, in the class of water, 1.10. The author seems more familiar with rivers than with the sea, as terms for anchor, sail, outrigger are missing, while the identifiable fish seem to be fresh-water varieties. Though the lexicon must have been composed at a time when trade was quite general, its compiler could not have belonged to a port-town.

One may note that cloth is not in the list of major trade goods, though 2.6.110–19 names many special kinds of cloth, beginning with silk and the costlier stuffs, many of which are known to have been overseas exports. Actually, the two main non-local necessities for the countryside were first salt, whereof 2.9.41–3 gives many varieties from the common sea-salt to types mined or extracted from the soil; second, the metals. The Vaiśya traded these regularly against farm surplus and cattle. That the trader supplied cities from the surplus would follow from the synonym *naigama* (2.9.78, 3.340) which derives from *nigama* (2.2.1, 3.3.139). Coins marked *negamā*[3] show that these nigama trading centres and the naigama traders actually existed. The word denotes a small traders' colony lower in rank as a town than the *puṭabhedanam* (2.2.1) = 'the place where packages of merchandise are opened up (for barter)'; that is, *puṭabhedanam* is placed earlier in Amara's list of city-settlements by the hierarchical principle. The reason for omission of cloth is not difficult to find. It was either manufactured locally by the village weaver *tantuvāya* whom we shall meet later in 2.10.6; or for finer varieties, by guilds (*śreṇī*), which are mentioned right at the beginning of the working men. It is much later that cloth plays any important role in the general economy of trade and barter; but by then the artisan guilds had vanished.

One should like to say that the *Amarakośa* was written in feudal times. But the evidence is poor. In the sections that follow, we shall find evidence for a class of unfree workmen, but none for serfs tied to the land, or for villas, manors, latifundia. There is no word that indicates land ownership, or special rights in land; the mountain and the king are both labelled *bhūmidhara* (3.3.60), whence land still belonged to the state in theory and practice. The word *sāmanta* which means neighbour in the *Arthaśāstra* and feudatory ruler in the *Harṣacarita* (p. 60; p. 100); *svabhujabala-nirjitāś ca karadī-kṛta mahāsāmantās taṃ siṣevire*) is missing here. This rather dangerous type of argument from negative evidence has to be used with caution. In any case, the corvee *viṣṭi* of the inscriptions with its synonym *ājū* (1.9.3) are grouped together in the 'class of hell', as some form of torture or punishment in the netherworld; there is no mention of it in connection with the Kṣatriya who should have exacted corvee labour in the name of the king, along with taxes, nor with the Vaiśya and Śūdra from whom it was levied. This seems again to confirm the Chinese traveller's description of about AD 410.

2. We now come to the actual *śūdravarga*, our main topic of study. The first four stanzas (2.10.1–4) give briefly the castes supposedly arising—in Brahmin theory—from miscegenation:

> शूद्राश्चावरवर्णाश्च वृषलाश्च जघन्यजाः।
> आ चण्डालात्तु संकीर्णा अम्बष्ठकरणादयः ।। १ ।।

शूद्राविशोस्तु करणोऽम्बष्ठो वैश्याद्विजन्मनोः ।
शूद्राक्षत्रिययोरुग्रो माघधः क्षत्रियाविशोः ।। २ ।।

माहिषोऽर्याक्षत्रिययोः क्षत्ताऽर्याशूद्रयोः सुतः ।
ब्राह्मण्यां क्षत्रियात् सूतस्तस्यां वैदेहको विशः ।। ३ ।।

रथकारस्तु माहिस्यात् करण्यां यस्य संभवः ।
स्याच्चण्डालस्तु जनितो ब्राह्मण्यां वृषलेन यः ।। ४ ।।

The interesting feature of this or any other similar list is that many of these mixed castes were honoured professions at an earlier period while *karaṇa* as the *kāyastha* (not mentioned in the *kośa*) registrar of village lands survived to a very late date in function, with a rising social status. The *rathakāra* is honoured in the Vedas; he and the *caṇḍāla* recur later in this varga without reference to the earlier citation. The *Arthaśāstra* (3.7) distinguishes the *sūta* from an earlier and higher one (cf. *Amara.* 3.3.61), as it does the *māgadha* (cf. 2.8.97); the latter is a tribal name like Ugra[4] but came to mean a guild, just as *vaidehaka* passed through these stages (? *udehaka* coins, Allan p. cxli, p. 240) to survive in 2.9.78 as 'trader', primarily, caravan-trader. The inclusion of all these in the Śūdra list indicates hardening of the ancient caste system into classes, with the complete disappearance of some professional categories suviving only by tradition.

But we come down immediately to reality:

कारुः शिल्पी संहतैस्तैर्द्वयोः श्रेणिः सजातिभिः ।
कुलकः स्यात् कुलश्रेष्ठी

Guild craftsmen existed, to rank above all others; this is proved by the epigraph of a silk-weavers' guild at Mandasor (AD 473–74; Fleet No. 18), and confirms my hypothesis of a hierarchical order in the dictionary. In the *Amarakośa*, the word *śreṇī* occurs once more in the sense of guild (2.8.18) showing the importance of the institution.

राज्याङ्गानि प्रकृतयः पौराणां श्रेणयोऽपि च ।

'The civic guilds are among the limbs of the kingdom.' In the previous quotation, *sajātibhiḥ* shows of endogamous caste nature of the *śreṇī* guild; Kṣīrasvāmin comments: *samāna-jātīya-kāru-saṃghaḥ*. The word *hālika* is found just once (2.9.64) in the sense of 'plough-ox', while to Hāla and so many after him in literature as well as inscriptions, it meant ploughman or farmer with a certain status.

मालाकारस्तु मालिकः ।। ५ ।।

कुम्भकारः कुलालः स्यात् पलगण्डस्तु लेपकः ।
तन्तुवायः कुविन्दः स्यात्तुन्नवायस्तु सौचिकः ।। ६ ।।

रङ्गाजीवश्चित्रकरः शस्त्रमार्जोऽसिधावकः ।
पादूकृच्चर्मकारः स्याद्व्योकारो लोहकारकः ।। ७ ।।

नाडिन्धमः स्वर्णकारः कलादो रुक्मकारकः ।
स्याच्छाङ्खिकः काम्बविकः शौल्बिकस्ताम्रकुट्टकः ।। ८ ।।

तक्षा तु वर्धकिस्त्वष्टा रथकारस्तु काष्ठतट् ।
ग्रामाधीनो ग्रामतक्षः कौटतक्षोऽनधीनकः ।। ९ ।।

These craftsmen are in approximately descending order: garland-maker, potter, plasterer (mason), weaver, tailor, painter, sharpener of weapons (armourer), cobbler and leather-worker, blacksmith, goldsmith (who would rank higher in the cities, but not in the villages), bangle-maker (from chank shells), coppersmith (who even now hammers copper pots), carpenter, sawyer (*rathakāra*, who dressed logs from timber, and planks; the earlier reference as a mixed caste is forgotten). The last line is specially to be noted: '(the carpenter) who depends upon a village is called a village carpenter, otherwise an independent carpenter'. Gupta period inscriptions[5] mention 'the carpenter's plot' in a village. The carpenter is not one fortuitously settled in a village, but an official component of the village with the blacksmith, leather-worker, potter, and the other *nāru-kāru* who continue to this day in the more conservative villages, while occurring in inscriptions of the late classical and early medieval period. Besides plots of land assigned to each one of them for personal cultivation, they get as perquisites an agreed share each of village harvests, against fixed duties of maintenance for tools, houses, etc. of the villagers. Amara looks upon his country through rustic eyes. Though some of these workers could also have served in the cities, a separate varga (2.2) takes care of city structures, including monasteries and houses; as noted, the goldsmith would rank above the others in civic life. The continuation of the list are precisely the remaining village craftsmen (even without the prefix *grāma*) with special prerogatives, say the *aḷutedār-baḷutedār* of Maharastra. The omission of the village clerk *karaṇa* surely indicates low taxes and little development of individual plot-holdings. No other equivalent official is given; that the name occurs among the mixed castes at the beginning of the list should not have prevented repetition in the proper context, as with *rathakāra, caṇḍāla, & c.* In sixth-century East Bengal [now Bangladesh], where the system could not have differed much from that of the late Gupta period (*I.A.* XXXIX, 1910, pp. 193–216; Faridpur dist.), the officials concerned with registry of plots and taxation seem to be directly in the king's service, above and not a part of the village. The *grāma-kāru* village functionaries of an *agrahāra* were (*El.* V., p. 112; at Dibbida April 6, 1269): carpenter, goldsmith, barber, blacksmith, potter, oil-extracter: *takṣakaḥ svarṇakāraś ca kṣaurikaḥ karmakārakaḥ; kulālas tilahattā ca pradattā grāmakārukāḥ.* These are exempted *en masse* from the donation, holding their fields and prerogatives even after the gift of the village to Brahmins.

क्षुरी मुण्डी दिवाकीर्तिर्नापितान्तावसायिनः ।
निर्णेजकः स्याद्रजकः शौण्डिको मण्डहारकः ॥ १० ॥
जाबालः स्यादजाजीवो देवाजीवस्तु देवलः ।

Of these, the barber, washerman (dhobi), and non-Brahmin cult-priest still maintain their village position; the vintner and goatherd later dropped out because of changes in state, religion, and the denser settlement (plus overcultivation) which, in the final analysis, brought the changes about. The many varieties of wine named further on in the varga show that drinking fermented liquor was a normal and important village activity.

The next group is of those who purveyed amusement, apparently itinerant magicians, players, musicians who still survive to eke out their increasingly precarious existence. The *Arthaśāstra* (2.1) forbade their entering into (royal) villages at all, while Amara's *nāṭyavarga* (1.7) covers the higher dramaturgy favoured by city folk and the court. He considers in 2.10 the Śūdras and their associates; the vast majority of Śūdras lived by working on the land, in villages.

स्यान्माया शाम्बरी मायाकारस्तु प्रतिहारिकः ॥ ११ ॥
शैलालिनस्तु शैलूषा जायाजीवाः कृशाश्विनः ।
भरता इत्यपि नटाश्चारणास्तु कुशीलवाः ॥ १२ ॥
मार्दङ्गिका मौरजिकाः पाणिवादास्तु पाणिधाः ।
वेणुध्माः स्युर्वैणविका वीणावादास्तु वैणिकाः ॥ १३ ॥

Still lower in the scale were the trapper, hunter, and butcher who purveyed flesh. The last has almost vanished from the ranks of Hindu castes, with the advent of Muslims and Christians. The trappers are still to be found as the *phāsepārdhīs* in western India. But they are now virtually the lowest of the low, being tribal folk who specialize in trapping for birds or in some groups for animals, in spite of the almost extinct game. Their actual livelihood is for the most part by begging, and it seems to me that their correspondence to Amara's professionals is fortuitous, some tribesmen having moved into professions that were obsolete in society proper when our village settlements expanded far beyond the Gupta age. The *Amarakośa* categories cannot apply strictly to all times and localities.

जीवान्तकः शाकुनिको द्वौ वागुरिकजालिकौ ।
वैतंसिकः कौटिकश्च मांसिकश्च समं त्रयम् ।। १४ ।।

3. All the preceding workers have some particular skill which enables them to earn a living. We now come to the lowest sub-classes, namely those who have only unskilled labour or none to offer.

भृतको भृतिभुक् कर्मकरो वैतनिकोऽपि सः ।
वार्तावहो वैवधिको भारवाहस्तु भारिकः ।। १५ ।।
विवर्णः पामरो नीचः प्राकृतश्च पृथग्जनः ।
निहीनोऽपसदो जाल्मः क्षुल्लकश्चेतरश्च सः ।। १६ ।।

Of these, the *pāmara* 'scabby fellow' is the Indian proletarian, not found in the *Arthaśāstra* or *Manusmṛti*, but known throughout classical Sanskrit literature. The *Arthaśāstra* (4.4) knows *jālma* only as 'rascal', the abuse being used for a rich man there; with Amarasiṃha, the *jālma* is about the lowest grade of workman. Most of these labourers, arranged quite unmistakably in descending order, came into their own at planting and harvest, two periods when labour was scarce while the monsoon forced accurate timing of all farm operations at the risk of losing the whole crop. These are all in the category of free workers, for below them comes another of drudges who were not free, being bondsmen of some kind.

भृत्ये दासेरदासेयदासगोप्यकचेटकाः ।
नियोज्यकिङ्करप्रैष्यभुजिष्यपरिचारकाः ।। १७ ।।
पराचितपरिस्कन्दपरजातपरैधिताः ।

Historically, most of these emerged from the debt-slave who bound himself over in times of famine, often a decayed tribesman. They furnish a basis for later feudalism 'from below', taking—with the poorest tenant-farmers—the place of serfs in medieval Europe. The omission of the scavenger (*bhaṅgī*) so essential in a large Indian city would again indicate that we are dealing mainly with village life. The village scavenger is, of course, the pig mentioned as such in 2.10.23 later.

मन्दस्तुन्दपरिमृज आलस्यः शीतकोऽलसोऽनुष्णः ।। १८ ।।
दक्षे तु चतुरपेशलपटवः सूत्थान उष्णश्च ।

These simply classify workers according to degrees of sloth or diligence. We now come to the human beings allowed to hang upon the fringes of society, loathed because of their unclean food (carrion, dogmeat), or calling (disposal of corpses).

चण्डालप्लवमातङ्ग दिवाकीर्तिजनङ्गमाः ।। १९ ।।
निषादश्वपचावन्तेवासिचाण्डालपुक्कसाः ।

The mixed origin of Caṇḍāla in 2.10.1, 4 above is forgotten when listing the actual untouchables who huddled just beyond the edge of settlements as is shown by the term *antevāsinaḥ*. Actually the Caṇḍāla is of tribal origin[6] (cf. *pāñcāla*), as are innumerable other castes actually found today in India—mostly śūdras, but some risen by vocation in economic and therefore social status, to a place among the three higher caste-classes. The proximity to the tribes is reflected in the next line:

मेदाः किरातशबरपुलिन्दा म्लेच्छजातयः ।। २० ।।

These are some of the tribes who led their independent existence beyond the pale of classical Indian society; some of Amara's names may be from the literary record rather than ethnographic observation. However, in 2.2.20 *cd* we have, as distinct from the usual *grāma* village, *ghoṣa Ābhīra-pallī syāt pakkaṇaḥ śabarālayaḥ*. The *Ābhīras* certainly existed, occurring in so many inscriptions as raiders and tribesmen. They still exist in U.P. as the Ahir caste, being cattle-breeders and pastoralists, generally living by themselves in separate villages or section of a village. Amarasiṃha's commentators give *ābhīra* as merely a herdsman, Amara himself ranking *ābhīra* among the synonyms of herdsmen in 2.9.57. But *pallī* means hamlet of tribesmen or aborigines throughout classical Sanskrit, with its own savage chief *pallīpati*; that the word occurs in the same line with *pakkaṇa* which is unmistakably a savage camp, is significant, both being well beyond the *grāma* and *grāmānta* of the preceding line, hence not agricultural. The Ābhīras were defeated as a tribe by Samudragupta according to Hariṣeṇa's *praśasti* on the Allahabad pillar; therefore a century or so might be allowed to pass till the age when they became tribal shepherds, no longer fighters. We may note that Amara has not the word *padraka* or its equivalent, found in inscriptions from the sixth century at least, for offshoots of a village that later developed into villages by themselves and are still marked by such endings of place names. Among omissions of tribal names are not only all the other tribes in Samudragupta's panegyric but also the Licchavis familiar by name to any Buddhist, surviving as a traditional mixed caste in the *Manusmṛti*, and the name of a royal house into which Candragupta I married. Thus, the tribesmen Amara does mention are only such as were generally familiar under the particular or generic names. That they had separate languages of their own follows from their being called *mleccha-jātayaḥ*, which also puts them beyond the confines of organized society. That they lived mostly by hunting is implied by the immediate juxtaposition of:

व्याधो मृगवधाजीवो मृगयुर्लुब्धकोऽपि सः ।

This list of hunters is followed by dogs and terms of the chase. The order then becomes a bit disturbed, as the dog naturally leads to other familiar village animals, among which is the *viṭcara* (filth-eater), the pig. The regular herd animals appertain to the vaiśya's chapter.

कौलेयकः सारमेयः कुक्कुरो मृगदंशकः ॥ २१ ॥
शुनको भषकः श्वा स्यादलर्कस्तु स योगितः ।

श्वा विश्वकद्रुर्मृगयाकुशलः सरमा शुनी ॥ २२ ॥
विट्चरः सूकरो ग्राम्यो वर्करस्तरुणः पशुः ।

आच्छोदनं मृगव्यं स्यादाखेटो मृगया स्त्रियाम् ॥ २३ ॥
दक्षिणारुर्लुब्धयोगाद्दक्षिणेर्मा कुरङ्गकः ।

Amara now lists the thieves who (like the hunters) would have either been tribesmen preying upon organized society as chance offered, or individuals who would not submit to the mean life of a worker.

चैरैकागारिकस्तेनदस्युतस्करमोषकाः ॥ २४ ॥
प्रतिरोधिपरास्कन्दिपाटच्चरमलिम्लुचाः ।
चौरिका स्तैन्यचौर्ये च स्तेयं लोप्त्रं तु तद्धनम् ॥ २५ ॥

The rest of the *varga* lists implements and tools used by the various subclasses, though not in the same order; in fact, rope or knives would be of universal use, not confined to a particular subcaste. The reader should note specially the last three groups of terms. Stanzas 38. *cd* to 39. *ab* detail eleven synonyms for wages, purchase price, or compensation. In 39. *cd*—43, the author presents us with a large variety of wines, some wine-vessels, and two words *āpānam*, *pānagoṣṭhikā* for large drinking parties. The implication is that wine was very commonly drunk, though not generally traded by the Vaiśya. The manufacturers *śauṇḍika* and *maṇḍahāraka* of 2.10.10 *d* are high in the village ranking. The wines prepared by these specialists were primarily a solace of the working class, not a major article of trade over long distances, nor an indispensable adjunct of the warrior. This would account for their mention immediately after wages. The words *gañjā* and *madirāgṛham* in 2.2.8 show the alehouse to have been as notable a feature of city as the hospice *maṭha* earlier in the same line. But neither the words nor the institution play the same role in classical Sanskrit literature as the travern in English, nor do we find development into 'inn' or 'hotel', as happened even in China with 'wine-house'. We know that the upper classes also indulged occasionally, particularly in connection with the act of love; yet Brahmins and Buddhists alike forbade its use, while addiction would have been scandalous for any member of the higher castes. That is surely why the wine list is followed immediately by its inseparable but more fashionable companion, gambling. This was certainly not restricted to the śūdra, being known to the aristocrats since the *Ṛgveda*. Still, recording dice and game terms here indicates that such play had fallen into disrepute with the religious and the high-born. The more intellectual game of chess is nowhere mentioned by Amara though supposedly an Indian invention about his period.

वीतसंस्तूपकरणं बन्धने मृगपक्षिणाम् ।
उन्माथः कूटयन्त्रं स्याद्वागुरा मृगबन्धनी ।। २६ ।।

शुल्बं वराटकं स्त्री तु रज्जुस्त्रिषु वटी गुणः ।
उद्धारणं घटीयन्त्रं सलिलोद्वाहनं प्रहेः ।। २७ ।।

पुंसि वेमा वायदण्डः सूत्राणि नरि तन्तवः ।
वाणिर्व्यूतिः स्त्रियौ तुल्ये पुस्तं लेप्यादिकर्मणि ।। २८ ।।

पाञ्चालिका पुत्रिका स्याद्वस्त्रदन्तादिभिः कृता ।
(जतुत्रपुविकारे तु जातुषं त्रापुषं त्रिषु) ।। २९ ।।

पिटकः पेटकः पेटा मञ्जूषाऽथ विहङ्गिका ।
भारयष्टिस्तदालम्बि शिक्यं काचोऽथ पादुका ।। ३० ।।

पादूरुपानत् स्त्री सैवानुपदीना पदायता ।
नध्री वर्ध्री वरत्रा स्यादश्वादेस्ताडनी कशा ।। ३१ ।।

चाण्डालिका तु कण्डोलवीणा चण्डालवल्लकी ।
नाराची स्यादेषणिका शाणस्तु निकषः कषः ।। ३२ ।।

व्रश्चनः पत्रपरशुरीषिका तूलिका समे ।
तैजसावर्तनी मूषा भस्त्रा चर्मप्रसेविका ।। ३३ ।।

आस्फोटनी वेधनिका कृपाणी कर्तरी समे ।
वृक्षादनी वृक्षभेदी टङ्कः पाषाणदारणः ।। ३४ ।।

ककचोऽस्त्री करपत्रगारा चर्मप्रभेदिका ।
सूर्मी स्थूणाऽयःप्रतिमा शिल्पं कर्म कलादिकम् ।। ३५ ।।

प्रतिमानं प्रतिबिम्बं प्रतिमा प्रतियातना प्रतिच्छाया ।
प्रतिकृतिरर्चा पुंसि प्रतिनिधिरुपमोपमानं स्यात् ।। ३६ ।।

वाच्यलिङ्गाः समस्तुल्यः सदृक्षः सदृशः सदृक् ।
साधारणः समानश्च स्युरुत्तरपदे त्वमी ।। ३७ ।।

निभसंकाशनीकाश प्रतीकाशोपमादयः ।
कर्मण्या तु विधाभृत्याभृतयो भृर्म वेतनम् ।। ३८ ।।

भरण्यं भरणं मूल्यं निर्वेशः पण इत्यपि ।
सुरा हलिप्रिया हाला परिस्रुद्वरुणात्मजा ।। ३९ ।।

गन्धोत्तमा प्रसन्नेराकादम्बर्यः परिस्रुता ।
मदिरा कश्यमद्ये चाप्यवदंशस्तु भक्षणम् ।। ४० ।।

शुण्डापानं मदस्थानं मधुवारा मधुक्रमाः ।
मध्वासवो माधवको मधु माध्वीकमद्वयोः ।। ४१ ।।

मैरेयमासवः सीधुर्मेदको जगलः समौ ।
संधानं स्यादभिषवः किण्वं पुंसि तु नग्नहूः ।। ४२ ।।

कारोत्तरः सुरामण्ड आपानं पानगोष्ठिका ।
चषकोऽस्त्री पानपात्रं सरकोऽप्यनुतर्षणम् ।। ४३ ।।

धूर्तोऽक्षदेवी कितवोऽक्षधूर्तो द्यूतकृत्समाः ।
स्युर्लग्नकाः प्रतिभुवः समिका द्यूतकारकाः ।। ४४ ।।

द्यूतोऽस्त्रियामक्षवती कैतवं पण इत्यपि ।
पणोऽक्षेषु ग्लहोऽक्षास्तु देवनाः पाशकाश्च ते ।। ४५ ।।

परिणायस्तु शारीणां समन्तान्नयनेस्त्रियाम् ।
अष्टापदं शारिफलं प्राणिद्यूतं समाह्वयः ।। ४६ ।।

उक्ता भूरिप्रयोगत्वादेकस्मिन् येऽत्र यौगिकाः ।
ताद्धर्म्यादन्यतो वृत्तावूह्या लिङ्गान्तरेऽपि ते ।। ४७ ।।
।। इति शूद्रवर्गः ।। १० ।।

NOTES

1. The edition used of the *Amarakośa* is the very popular one (now out of print) issued by the Bombay Dept. of Public Instruction (6th ed. 1907), with the commentary of Maheśvara, enlarged by Messrs. Thatte, Talekar, Jhalakikar. Also the Nirnayasagar edition (6th, Bombay 1944) with the commentary of Bhanuji Diksita. The Subhūticandra (between 1062 & 1172) fragment was copied out for my use from a Malabar palm-leaf at the D.A.V. College library, Hoshiarpur, Madras Govt. R. 2933 being a recent paper transcript; copies in Tibet are reported by Rahula Samkrtyayana, *JBORS* XXI, 1935, p. 40, p. 43. Sarvānanda (AD 1159), known as Vandyaghaṭīya (an early Banerji), was edited, quoting Kṣīrasvāmin in *extenso*, for the Trivandrum Skt. Series: nos 38, 43, 51, 52 (Trivandrum 1913–17). Kṣīrasvāmin's commentary was edited and published by K.G. Oka at Poona 1913; Oka assigns Amarasiṃha to the fourth century AD. Kṣīrasvāmin to the second half of the eleventh century AD—whence the grammarian Kṣīra at the court of king Jayāpīḍa of Kasmir (*Rājataraṅgiṇī* 4. 489) is some other person. The *Arthaśāstra* of Kauṭilya: *index verborum* by Shama Sastry (3 vol., Mysore 1924–25), ed. Mysore 1924, and T. Ganapati Sastri Tri. Skt. Ser. edition. The *Harṣacarita* (first half of the seventh century AD) text was issued by the Nirnayasagar Press, 7th, ed. Bombay 1946. In dating lesser-known writers, I follow the authoritative work of P.K. Gode (Singhi Jain Series 37–8), *Studies in Indian Literary History*. For social developments and conditions, the findings of a paper of mine to appear this year in the *J. Am. Or. Soc.* have been used.
2. P.M. Roget: *International Thesaurus of English Words and Phrases*, ed. C.O.S. Mawson, New York 1925; introduction, p. xviii.
3. John Allan: *Catalogue of Ancient Indian Coins* (*in the British Museum*), London 1936; pp. cxxvi–cxxviii, 214–15, and plates.
4. R. Fick: 'Die Mischkaste der Ugras' in *Festschrift Winternitz* (Leipzig 1933), pp. 279–86. In *Rājataraṅgiṇī* 1.348, Ugra as a personal name.
5. The Gunaighar grant of Vainyagupta, dated 13 Dec., AD 506 (according to its editor D.C. Bhattacharya, *IHQ. VI.* 1930, pp. 45–60 has the boundary: *purvvena guṇekagrahāra-grāma-sīmā Viṣṇuvardhakikṣetraś ca*, though Mr. Bhattacharya translates *vardhaki* as 'engineer', p. 58). Fleet no. 38 (inscription of Dharasena II of Valabhi, AD 571–72) gives .... *vardhaki-pratyaya, pratyaya* meaning 'holding' or 'assigned plot' in these epigraphs.
6. The Caṇḍālas had their own settlements and their own separate language according to *Jātakas* 497 (*Mātaṅga-paṇḍita*) and 498 (*Citta-sambhūta*); however, they were even then so despised that Brahmin girls washed out their eyes after having gazed by accident upon the untouchable. On the other hand, clever Caṇḍālas could manage to pass themselves off as Brahmins, according to these tales.

16

Origins of Feudalism in Kaśmīr*

Feudalism in India was so often a concomitant of Muslim rule that underlying causes are completely forgotten under the religious upheaval, or attributed to foreign domination. Kaśmīr, being a valley isolated from serious foreign intervention till long after feudalism had conquered, shows us that the change cannot be imputed either to theology or to the Mohammedan conquest. The natural course of events may be seen undisguised; in essence, the explanation applies to the rest of India also, allowing for minor details and particular variations due to local conditions. The need to import trade goods, especially salt and metals, difficult transport, lowering of grain prices with great increase in village settlements due to extensive water-works, meant concentration of wealth in a few hands for each small group of villages. A Kaśmīr village could not be as nearly self-sufficient as one in India, for the rigorous and more varied climate made it impossible to do without wool, which had to be produced for exchange against cereals as a commodity, as were grapes; this led to quicker development along the same road. In India, there arose a class of armed barons who expropriated the surplus for trade; in Kaśmīr, the man who had the surplus acquired more wealth by trade, took to arms, turned into a Ḍāmara. The caste system was never strong enough in Kaśmīr to prevent such direct change of class whenever economic advantage permitted. For that matter, it could not prevent this in India, but a formal change of caste had to be effected, which took far more time, and was not possible for individuals without great difficulty. The *agrahāra* grants made to brahmins did not prevent the rise of private (feudal) ownership of land, but rather served, in the trading environment, as model of the later *jāgīr*, whereas land in India proper continued to belong to the state till a later period. The conflict between king and Ḍāmara, feudal baron and central power, led ultimately to a Kaśmīrian Hindu king plundering temple property and melting down the images for profit, without change of religion or theological excuses, simply to maintain the army and a costly state apparatus. Because this could not continue forever, we have the ultimate victory of feudalism, and weakening of the central power.[1]

**Journal of the Bombay Branch of the Royal Asiatic Society*, vols 31–2 (1956–57), pp. 108–20.

The gold washed in small amounts from Kaśmīr rivers and a few precious or semi-precious stones found in the hills never balanced the imports needed for the Valley population. Hence, they could not have created private property in land, nor made it worth while to expropriate the surplus from cultivators. It is known that the food-producing lands were held in common under tribal and early central rule; private enterprise is responsible for later specialized crops and conversely. Thus it was necessary to have a commodity that can be grown extensively on the land, particularly on the clayey lacustrine deposits (*uḍḍāra*, or *uḍar*) less productive with cereals; the commodity must be relatively high-priced, but still in great demand, easy to transport over the mountains to a large market, without giving rise to serious competition. These conditions are satisfied by the light and precious saffron (*Crocus sativus*) whose synonym *Kaśmīraja* proves the virtual monopoly over the Indian market enjoyed by Kaśmīr (because of its climate and soil) from a long time before the *Amarakośa* till the dominance of overseas trade. Chinese sources[2] show it being imported from its habitat Kaśmīr into China during the third century AD whence it must have been exported to India from Kaśmīr at least that early. The original ritual use is reflected in the change of colour from *kāṣāya* (the present Banaras *katthai* red) to saffron for a Buddhist monk's robes; the demand as medicine, cosmetic, pigment, and condiment expanded insatiably. Without the Crocus or some equivalent commodity, the internal history of Kaśmīr would have been far less turbulent, as may be seen by comparison with the small neighbouring Himalayan valley Cambā, which shows relatively uneventful continuity of succession in the same dynasty, with people still worshipping images dedicated about AD 700 in temples standing over a thousand years.[3] It is known that saffron does not grow elsewhere on the Indian subcontinent, but its role in the means and relations of production for Kaśmīr has escaped our historians.

1. *Caste and Class*

The enduring isolation of Kaśmīr, due to difficulties of forcing the passes with trifling rewards of conquest, justified Kalhaṇa's boast: 'That country may be conquered by the force of spiritual merits but not by forces of soldiers' (1.39). Foreigners continued to enter as merchants, occasionally teachers and officials: even from Tibet, Lo-stonpa, (3.10); or Muktāpīḍa-Lalitāditya's chief minister (4.215 ff.) Caṇkuṇa (Tsian-kiun) from Chinese Turkestan. But the main influences cultivated or imported deliberately from outside the Valley were Indian, first Buddhism and then Brahminism in its developed form. In 1.87, we have the first mention of an *agrahāra* being given to Brahmins, by king Lava. Such donations are recorded by name throughout the eight books of the chronicle, indicating that Brahmins were a main support of class-division, king, and state. Many of the priests were brought from outside; the Hun king Mihiragula bestowed land upon 'Brahmans from Gandhāra, resembling himself in their habits and verily the lowest of the twice-born' (1307). The 'wise king' Gopāditya bestowed the 'Gopa-*agrahāras* on Brahmans born in Ārya-deśa. He removed those who ate garlic to Bhūkṣīravāṭikā, and transferred the Brahmans who had broken their rules of conduct to Khāsaṭā. Other Brahmans again of a holy life, whom he had brought from pure countries, he settled in Vaścikā and other *agrahāras*' (1.341–3). This incidentally shows that the notorious laxity of observances on the part of Kaśmīrian Brahmins is of ancient standing.

The Brahmins were not the only foreign ideological and priestly imports of use to the state. Buddhist monks are supposed to have become powerful from the time of king Jalauka (son of Aśoka) who is further credited with having introduced the four-caste class system, legal procedure, and a central administration headed by eighteen officials (1.117–20) which continued as the standard form throughout Kaśmīrian history, with later modifications (4.141–3 etc.). The monks nearly extinguished the tribal Nāga cults (1.177–8) which would have obstructed any central rule unless wiped out or assimilated by a state religion. The latter step was ultimately taken by Brahmins who had been reduced to helplessness at the time of 'the *bodhisattva*, Nāgārjuna'. These priests gained a solid base among the people by writing the (still extant) *Nīlamata-purāṇa* (1.182–6) which gives official sanction to the Nāga cult ritual, readjusted conformably to standard Brahmin practice and observances, with royal patronage from the time of Gonanda III. Free tribal elements continued in marginal localities, as for example Khaśa (= the present Khakha), while those absorbed may be reflected in the Kaśmīrian *Krām* names.

Apart from slackness in observances, the class behaviour of the Brahmins forfeited their sanctity to a considerable extent. Most of them were landholders or government officials. Many fought on the battlefield, arms in hand, solely for personal advancement unconnected with any religious or theological question (cf. 8.2319–2330; 8.3018; over 600 years earlier than in India proper); the Brahmin Rakka rose from a mere foot-soldier to the position of prime minister (5.424 ff.), participating in the usual court intrigues. Therefore the Brahmins were not specially influenced in politics as a priesthood except for a brief period under the Brahmin king Yaśaskara (AD 939–48). On occasion, even their fasting to death was looked upon with contempt, without moving the king's heart in the least (4.631–9). One of the results of this conduct was the relative absence of theological controversies in Kaśmīr. Kings like Lalitāditya, scholars like Kṣemendra, paid equal reverence to all sects, without feeling discord or incongruity. Buddhist monasteries continued side by side with Śaiva and Vaiṣṇava temples, primitive worship of the Mothers with occasional human sacrifice, and still older cults of various Nāgas.

The kings, too, were often of doubtful lineage—as happened in the rest of India, though much better disguised there with Brahmin aid. Utpala, founder of a dynasty, was the son of a spirit-distiller (4.677–9); the preceding Kārkoṭa dynasty was of still lower tribal origin (Stein I. p. 86). Ministers of low birth were not uncommon (8.181–5) while the *Khaśa* Tuṅga rose from a buffalo herdsman and letter-carrier to become favourite and minister of queen Diddā (6.318–21), virtually ruling the kingdom till his murder following a defeat outside Kaśmīr by Mahmūd of Ghazni about AD 1013. King Cakravarman (third reign AD 936–7) took a Ḍomb girl Haṃsī as his chief queen (5.359–87) raising her low relatives to the highest power; the same king outraged a Brahmin's wife (5.402–3), yet Brahmins unhesitatingly accepted *agrahāras* from him, as from his unspeakably cruel successor Unmattāvanti (5.440–2).

Thus the caste system in Kaśmīr was, in contrast to the rest of India, too thin a disguise for that of classes. The *agrahāra* became a hereditary *jāgīr* form of private property in land, and as such Stein translates it. In 5.397–9 we have the village Helu given as *agrahāra* to the Ḍomb singer Raṅga and so recorded; this is unprecedented, there being no record of such a grant made to a non-priest, let alone a Ḍomb, for any purpose whatever, in any of the numerous surviving Indian copper plates. In addition to land grants, there was a later system of income-earning funds (*gañja*) established for charity, and administered by separate officials.

2. *Development of Irrigation*

Before turning to feudalism proper, we have to trace another of its root causes, besides the above-mentioned land-grants and investment foundations (*gañja*) for Brahmins and religous institutions. This, curiously enough, is the action of the central government in controlling floods and promoting irrigation. The earliest legends relate to divine intervention, which made a river-valley out of what had been a lake spreading over most of Kaśmīr; the existence of such a lake has some support in geology and varied deposits. The earliest mentioned irrigation canal, under king Suvarṇa (1.97), is identifiable and in use to this day. The later but still legendary king Dāmodara II was credited with building an irrigation dam, and several dykes for protection against floods (1.156–9). King Bālāditya's ministers built an embankment as well as a temple. The military achievements of king Muktāpīḍa-Lalitāditya (*circa* AD 699–736), who overran most of India, and killed Yaśovarman of Kanauj, had a solid foundation in control and distribution of water in the Valley. Of course, his martial exploits distracted attention from the real achievement, which is mentioned in passing: 'At Cakradhara, he made an arrangement for conducting the water of the *Vitastā* (Jhelum) and distributing it to various villages by the construction of a series of water-wheels (4.191) . . . This country (of Kaśmīr) always (before) gave small produce, as it was (liable to be) flooded by the waters of the Mahāpadma lake (Vulur), and was intersected by (many) streams. When the waters had been drained off somewhat, through the great exertions of king Lalitāditya, it became productive to a small extent. Under the feeble kings who succeeded after the death of Jayāpīḍa, the country was again, just (as before) overtaken by disastrous floods' (5.68–78).

The great name in Kaśmīrian history is that of Suyya, a Caṇḍāla who was minister under Avantivarman (AD 855–83). He cleared the bed of the Vitastā after building a temporary dam; protected with embankments the spots regularly threatened by floods; arranged a new confluence for the Jhelum with the Indus and made a complete irrigation scheme. The performance left an indelible impression upon Kaśmīr, and its chronicler:

'He made the different streams with their waters, which are (like) the quivering tongues (of snakes), move about according to his will, just as a conjurer (does with) the snakes (5.102) . . . Having thus raised the land from the water like another primeval Boar (Viṣṇu), he founded various villages which were filled with a multitude of people. Keeping out the water by means of (circular) dykes, he gave to these villages the appearance of round bowls (*kuṇḍa*). (Hence) the people called these (villages), which are amply provided with all (kinds of) foodstuffs, by the name of Kuṇḍala (5.105) . . . After examining the different classes of land, he procured a supply of river water for the villages, which thus were no (longer) dependent only on the rainfall. After watering all the villages (lands), he took from (each) village (some) soil, and ascertained, by (observing) the time it took to dry up, the period within which irrigation would be required (for each soil respectively). He then arranged (accordingly) on a permanent basis for the size and distribution of the watercourse for each village; and by (using for irrigation) the Anūlā and other streams, embellished all regions with an abundance of irrigated fields which were distinguished for excellent produce (5.109–12) . . . On the lands which he raised from the water, thousands of villages such as Jayasthala etc. were founded by Avantivarman and others' (5.121). Naturally, Kalhaṇa appraises Suyya's work as above that of the mythical Kaśyapa and Saṃkarṣaṇa, equating it to the achievements of four complete incarnations of Viṣṇu (5.113–15).

We do not hear of later kings doing anything beyond bare maintenance work at best. These sweeping, well-planned, scientifically tested, and carefully executed waterworks remain unique in Kaśmīr, without taking second place elsewhere in India even to grandiose projects like Bhoja's lake at Bhopal (*IA*. 17, 1888, pp. 348–52).

The waterworks caused an increase of surplus which enabled new temples to be built and endowed with their own lands; fresh *agrahāras* were granted to Brahmins; kings patronized learned scholars and poets; occasionally, military adventures were attempted outside Kaśmīr, not always with success. However, the Śāhī kings of Udabhāṇḍa remained closely related to Kaśmīr ruling princes. The army, bureaucracy, and taste for luxury were additional powerful factors in future decline. The most important result of the irrigation and drainage works, whereof all the others were concomitants, and ultimately also the cause of internal disssensions which made invasion a triviality, was the following: 'There, where previously from the beginning of things the purchase price of *khārī* (= 177 lbs.) of rice was 200 *dinnāras* in times of great abundance, in that very land of Kaśmīr henceforth—O wonder!—the *khārī* of rice came to be bought for 36 *dīnnāras*' (5.116–17). This abundance disturbed the price structure, and balance of payments against imports, so as to accelerate greatly the tendencies that led to feudal dissensions and decay, tendencies that had remained latent and been counteracted hitherto by royal force. Administration of the new villages would strain the older state resources while increase in the number of clerical (*kāyastha*) officials for revenue collection would be disproportionately costly; the more so because most of the tribute collected from the peasantry disappeared into the pockets of the officials, without reaching the royal treasury. The traditional number—perhaps a legend of this period—of 66.063 Kaśmīr villages had shrunk to 2,870 with a total population of 814,000 according to the 1891 *Census*, while in 1835 a great famine had left only about 200,000 survivors.

3. *The Ḍāmaras*

The word Ḍāmara is peculiar to pre-Muslim Kaśmīr, meaning a local chief with some military power. After the time of Suyya, the quarrel between Ḍāmaras and king constitutes the principal motif of Kaśmīrian history. These chieftains made and unmade kings, fought battles with the central power and among themselves. In a word, they formed the equivalent of feudal barons far more than the *sāmantas* mentioned on occasion, who cannot have been tributary kings as elsewhere in classical Sanskrit, but were barons created by the court as counterpoise to the Ḍāmaras, as perhaps were the titulary Ṭhakkuras. The question, then, is: what made a Ḍāmara? There is no possibility of these people being a separate caste, or tribal chiefs surviving from ancient times, or army captains settled on the land to become local counts. The name has no tribal meaning like that of the *khaśas*, does not survive as a *krām* today, though (Stein II, p. 306) many of them in the eastern *Maḍavarājya* portion of the Valley were recruited from the Lavanya group (7.1229). The Ḍāmaras were *invariably* to be found in the most fertile cultivated portions of Kaśmīr (Stein II, p. 307).

Lalitāditya is supposed to have left in his testament the following advice to his successors:

'Those who wish to be powerful in this land must always guard against internal dissensions . . . Those who dwell there in the (mountains) difficult of access should be punished, even if they give no offence; because, sheltered by their fastnesses, they are difficult to break up if they have (once) accumulated wealth. Every care should be taken that there should not be left with the villagers more food supply than required for one year's consumption, nor more oxen than wanted for (the tillage of) their fields. Because if they should keep more wealth, they would become in a single year very formidable Ḍāmaras and strong enough to neglect the commands of the king. When once the villagers obtain clothes, women, woollen blankets, food, ornaments, horses, houses, such as are fit for the town; when the kings in their madness neglect the strong places which ought to be guarded; when their servants show want of discrimination; when the keep of the troops is raised from a single district; when the officials are closely drawn together by bonds of intermarriage; when the kings look into their own affairs as if they were clerks (*kāyastha*),—then a change for the worse in the subjects' fortune may be known for certain' (4.345–52).

The essential question is: were the Ḍāmaras feudal lords? Did they hold land as feudal property? The answer is fairly clear, in the affirmative. We must remember that rebellion at that time meant refusal to pay dues. Town merchants existed with great wealth, but without armed forces were never regarded as rivals to the king's power. King Durlabhaka-Pratāpāditya II fell in love with a very rich foreign (Punjabi) merchant's wife, who was ceded to him willingly by the husband (4.17–38) to become the chief queen Narendraprabhā. The Ḍāmaras were armed, owned villages, had their own fortified strongholds (7.1171–3, 1266–7). Such an establishment could not be maintained without collecting some dues from the villagers; there would have been no conflict with the centre if a reasonable share had been passed on. But a powerful Ḍāmara like Dhanva (5.48–58) could usurp villages granted to the leading temple of Śiva Bhūteśa. The later books of the *Rājataraṅgiṇī* are filled with details of the struggles, not only between the king and Ḍāmaras but between factions of Ḍāmaras, some of which might side with the king or set up their own king. To disarm villagers completely was out of the question in Kaśmīr, for hunting was always a useful supplement to farming, while the central power could not move rapidly enough to protect distant places against tribal or robber attack. Given a certain access of wealth, Ḍāmara power followed inevitably as the kings were never rich enough to maintain regularly paid and regularly supplied, strong local garrisons.

Kalhaṇa reports that contemporary Ḍāmaras about Śrīnagar were 'more like cultivators though they carry arms' (8.709). Thus the Ḍāmaras maintained a class of privilege[4] above the ordinarly cultivator, that of bearing arms. In 7.494–5, we are told of one Jayyaka, 'who was the clever son of a householder at Selyapura, called Mayana, had gradually attained the position of a Ḍāmara (*krāmād ḍāmaratvam agāt*). By the revenue of his land, and by selling victuals as a trader to far-off regions, this greedy person accumulated wealth and became in the course of time a rival to the lord of wealth (Kubera)'. This shows how a trading householder could become a Ḍāmara which thus denotes a status, not a caste. The confiscation of Jayyaka's wealth by king Kalaśa (7.499) solved the king's financial problems for life, but also converted that king into a very shrewd businessman (7.507–14), looking very profitably after his own trade and investments. For the position of trade and the traders in this connection, 4.712 tells us: 'Nara and other merchants who were in possession of spotless horses and owned villages, ruled Ḍārvābhisāra and the neighbouring regions, setting up (their own) thrones (in the early ninth century)'. Under Pārtha (AD 906–21), 'the king's ministers and the Tantrins (Pretorians) became wealthy, as they amassed riches by selling stores of rice at high prices (in times of famine)' (5.274). This proves that land was effectively in private ownership to a considerable extent, and that surplus could be traded either against imported goods, or held over for internal trade in times of famine, to increase accumulation of wealth. Combined with the right to bear arms exercised by all castes in Kaśmīr (even Caṇḍālas were armed as village, palace, and camp watchmen) this gives us the complete genesis of the Ḍāmaras, remembering that with an individual, his immediate relatives also became Ḍāmaras.

The low prices for grain would by themselves be of great help in forming accumulation in times of plenty. The Kaśmīrian *dīnnāra* was 3.64 grains of copper (Stein II, p. 315 seq.). Food prices in Kaśrmīr rose (Stein II, p. 325) in famine times under Harṣa (AD 1089–1101) only to 500 *dīnnāras* per *khārī* (177 lbs.) of rice. The normal price under Zainu-l'abidin (AD 1420–70) was 300, in times of famine 1500 *dīnnāras* per *khārī*. Under Akbar, the normal price had risen to 2900 *dīnnāras* per *kharī*, as the result of incorporation into the Mughal empire. So Suyya's vast reclamation and irrigation works increased the population and the number of villages, but left Kaśmīr with an increasingly difficult situation as regards payments against imports; a few people managed to control the surplus for sale outside. It also complicated the administrative problem for the kings, as started earlier. We may note that with the progress of Muslim trade, saffron was imported more and more into India from the Levant and other countries, by sea.

One feature of feudalism, the corvée, appears under a peculiar form in Kaśmīr because of local conditions. Transport was unusually difficult, road-building very costly, maintenance almost impossible. Moreover, assessment, payment of dues, and even of salaries was generally in terms of grain, as it continued to be till the Settlement of the late nineteenth century. Thus regular porterage was essential to maintain supplies for the central power. The transport as required service (*rūḍha-bhāroḍhi*) must have existed from much older times, but king Śaṃkaravarman (AD 883–902) is credited with organizing and enforcing it (5.172–4) on a strict, regular basis. The purely local Ḍāmaras might be counterbalanced by court *sāmantas*, and Ṭhakkuras with undefined powers and holdings. But this ultimately increased the number of feudal lords while the Ḍāmaras who sided with the successful king (e.g. Cakravarman, AD 936; 5.306–40) in a given struggle certainly could not be reduced in power, wealth, or privilege for their help.

4. *Iconoclasm Without Theology*

The breaking of images and violation of temple property appears in

Kaśmīr for what it actually was, the expropriation of accumulated wealth by the central power to pay for its expenses in the struggle against local chiefs. Even under Jayāpīḍa (eighth century), such measures had been taken, in spite of the king's having a copper mine (4.617) at his disposal. He had a costly army and costlier tastes inherited from his illustrious predecessor Lalitāditya. His *kāyasthas* pointed out to him the greater profits to be extracted from his own kingdom, without the risk and hardships of a foreign expedition (4.621); the advice was willingly accepted, with great profit to the king but far greater to the revenue officials (4.622). He began by taking the whole harvest, including the cultivator's share, for three years (4.628), which not only betokens cruelty and greed but proves desperate circumstances for the autocrat. 'With his mind merged in greed, the king took for friends the officials (*kāyasthas*) who carried off all property (of the subjects), while delivering only the smallest fraction of what they realized.' Even making all due allowance for the Brahmin Kalhaṇa's dislike of the *kāyastha* officials, this shows the failure of the only alternative to feudalism, namely honest and efficient central administration. Thereafter, Jayāpīḍa rapidly took over Brahmin *agrahāra* lands, desisting only when many of the priests died (apparently by fasting to death) while great numbers emigrated (4.631–3; 638–9); none of the rescinded lands were returned. King Śaṃkaravarman (AD 883–902) established two new taxes, one on markets (*aṭṭapatibhāga*) the other on domestic affairs (*gṛhakṛtya*) but these did not suffice (5.167). 'He took from the temples the profits arising from the sale of incense, sandalwood, and other (articles of worship) under the pretext that they were the (king's legal) share of the selling price. Then again he plundered straightway 64 temples, through special officers (placed over them) under the pretext of (exercising) supervision. The king resumed villages which belonged to the temples, against a compensatory assignment (*pratikara*), and (then) cultivated the land himself as (if he were) an agriculturist' (5.168–70). The king reduced weights but charged full weights for the enforced porterage corvée which he first organised, and levied even from temples. As temple lands were granted free of taxes, dues, and supervision, these measures helped convert them into feudal holdings. Special dues were levied in good feudal style for the payment of village officials (Skandakas, Grāmakāyasthas), while the regulation of weight by the *gṛhakṛtya* office was another source of additional revenue (5.171–6). This meant changing the old official set-up, with the appointment of five secretaries (*divira*) with a special treasurer (*gañjavara*; 5.177). The words are supposed to be of Persian origin and many indicate some foreign inspiration.

At least, Śaṃkaravarman granted some compensation for resumed temple lands, thus recognising property rights in land. The logical culmination of this confiscatory scheme came under Harṣa (AD 1089–1101) who fought, but ultimately lost, a war of extermination against the Ḍāmaras. He began by a fortuitous confiscation of treasures belonging to the deserted Bhīmakeśava temple founded (near Mārtāṇḍa) by Bhīma Śāhī; while the priests were quarrelling among themselves, the idol's silver armour had been stolen from the locked temple. However, the members of the *purohita pāriṣadya* fasted till the king exempted them from the 'forced carrying of loads (*rūḍhabhāroḍhi* corvée) in compensation (7.1089–1088). Thereafter, king Harṣa resorted to direct action against the other temples, 'as he was addicted to extravagant expenditure upon various corps of his army' (7.1089). 'Then the greedy-minded (king) plundered from all temples their wonderful treasures which former kings had bestowed there. In order to get hold of the statues of gods, too, when the treasure (of the temples) had been carried off, he appointed Udayarāja 'prefect for the overthrow of divine images (*devotpāṭana-nāyaka*)'. In order to defile the statues of gods, he had excrement and urine poured over their faces by naked mendicants whose noses, feet, and hands had rotted away (? lepers)' (7.1090–2). 'There was not one temple in a village, town, or in the City which was not despoiled of its images by that *Turuṣka*, king Harṣa. Only two chief divine images were respected by him, the illustrious Raṇasvāmin in the City and Mārtāṇḍa (among the images) in townships. Among colossal images, two statues of Buddha were saved . . .' (7.1095–8). Yet the king was not a convert to Islam, like some of his foreign mercenaries, the term *turuṣka* being applied to him here only in hatred: 'While continually supporting the *Turuṣka* captains of hundreds with money, this perverse-minded (king) ate domesticated pigs until his death' (7.1149). His ideas on incest agreed with those of Caligula (7.1147–8), but unlike the Roman emperor Harṣa claimed no divinity for himself. The confiscation of sacred property was one of many (7.1100–7) straightforward fiscal measures under the *arthanāyaka*, unconnected with any theological persecution of the Brahmins, change of religion, or establishment of new cults. The king was a man of great culture, poet, composer, patron of learning (7.933–44).

The Mohammedan conquest of Kaśmīr took place, virtually without striking a blow, in AD 1339 when the condottiere Shah Mir deposed queen Koṭā (widow of the last Hindu ruler) to found his own dynasty. Islam made its way into Kaśmīr by gradual conversion, being quite peacefully adopted by the great majority during the latter half of the fourteenth century, without the accompaniment of catastropic upheavals; the ground had long been prepared by the influx of foreign adventures in royal service. The traditional Brahmin officials continued in office, many as landlords; Sanskrit remained in use for administration, and is found even on Mohammedan gravestones (Stein I, p. 131, footnote); the *Lokaprakāśa* shows an administrative jargon compounded from Sanskrit, with Arabic and Persian words (e.g. *suratrāṇa* and *surasthāna* for sultan) in use for land-grants, *huṇḍikā* scrips etc., as late as the time of Shah Jehan. Of the Muslim rulers, only one tried idol smashing; his successor Zainu-l-ābidin (1420–70) not only patronized Sanskritists and Brahmins, but went on some of the traditional Hindu pilgrimages. The final conquest under Akbar consummated the trend, leaving Kaśmīr a beautiful poverty-stricken appendage of India, with vast undeveloped resources in mineral wealth and hydro-power, increasingly severe famines, steadily dwindling population. The real struggle had been fought out centuries earlier between king and Ḍāmaras.

The importance of Kaśmīr to the historian lies in that it shows the true motive force of Indian feudalism, the need to increase commodity production by local concentration of surplus, whose extraction was heightened by force in the hands of the nobles.

NOTES

1. The main source is M.A. Stein's translation *Kalhaṇa's Rājataraṅgiṇī, a Chronicle of the Kings of Kaśmīr* (London 1900), to which all otherwise unspecified numbers in brackets refer, by book and verse. 'Stein' refers to the able translator's most useful notes. The author was the son of Caṇpaka, a hereditary Brahmin court official writing under king Jayasiṃha (AD 1128–1149); the earlier part is legendary, but the legends are not pure myth, being associated with place-names. The edition of the text by Durgaprasada (2 vol., Bombay 1892, 1894) was used but not directly cited. A. Weber's valuable study, with long excerpts, of the *Lokaprakāśa* (*Indische Studien* XVIII, 1898, pp. 289–412) adds very little that might be of use here, particularly as that text needs critical edition; at least, the two MSS I have seen, namely 336 and 339 of 1875–6 in the Bombay Government collection at the BORI, Poona, differ too much in detail in the only common portion (the first section, as from an unspecified Kṣemendra's *Kathāsaritsāgara*, being all we find in the former MS; even the second codex, in Sāradā script, is too incorrect). Whether words like *gañja* and *divira* are loan words from Persian or ghost-words needs more investigation, though the former view seems the more probable. The *Nīlamata-purāṇa*, edited by K. de Vreese (Leiden, 1936), seems to contain nothing relevant beyond the information given by Stein in his footnotes.

2. B. Laufer: *Sino-Iranica* (Chicago 1919), pp. 309–23: particularly p. 317. See also Stein II, p. 428; W.R. Lawrence, *The Valley of Kashmir* (Oxford 1895), pp. 342–4.
3. J. Ph. Vogel: *Antiquities of Chamba State* (Arch. Sur. India, New Imperial Series, 36, Calcutta, 1911); cf. also *Indian Antiquary*, XVII (1888), pp. 7–13.
4. There seems to have been a special type of hair-dressing characteristic of the Ḍāmaras, though the reference does not make it clear whether it was as feudal barons or as Lavanyas that the hair was piled up. 'While he (king Harṣa) was killing the Lavanyas, he left in Maḍavarājya not even a Brahman alive if he wore his hair dressed high and was of prominent appearance' (7.1229). The *Subhāṣitaratnakoṣa* of Vidyākara, stanza 817 (by Viddūka) describes the owl peeking out of his trunk-hollow at evening as *ḍamarita-śiras*, and this may be connected with the *ḍāmara* hairdress.

17

The Basis of Ancient Indian History (I)*

I. 1. Introduction, 2. Old tribes and new, 3. Other tribes, 4. Forest tribes, 5. Caste as class.
II. 6. Rise and decline of trade, 7. Land grants, 8. Fields and inhabitants, 9. Recapitulation.

1. *Introduction*

The advance of agrarian village economy over tribal country is the first great social revolution in India: the change from an aggregate of gentes to a society. This is still reflected in the endless ramifications of the extant caste system, where the caste names, endogamy, commensal taboo, exogamous septs observed in practice (often with totemic names), and caste *sabhā* councils are all of tribal origin. Though the individual village appeared changeless, virtually self-sufficient, and of a fixed pattern with almost closed production, the increasing density of village settlement inevitably brought about successive transformations of the superstructure. We know that in spite of caste division of labour within the village, its production was not of commodities except as regards a small part of the surplus reaching the hands of the state. The methods for extracting this surplus would necessarily differ in the same district according as to whether it had two villages or two thousand. These changes in the state mechanism, and in the class of people who received the surplus, must be regarded as material for history, even when no episodes and chronological details or king-names are known.

What becomes then of the lack of historical sense which stamps all Indian source-materials and intellectuals, of all but the most recent period? The later, unchanging, virtually closed village economy is clearly

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responsible. Once settled down to its ultimate form, external happenings had very little meaning for the unarmed village. Consciousness of other people means contact with them which in turn implies war or trade and exchange of commodities. Compared to the round of seasons with their marked differences of climate, occupation, and food supply, the difference between years was negligible because the production and labour were not cumulative. The year's produce was distributed and consumed during the course of the year, mostly within the village. Any outstanding personality either migrated to the capital, or if he left a mark upon the place of his birth was swallowed up by folklore, myth, deification of the hero or saint to whom a cult might be dedicated but whose personal history would evaporate in legend. The rustic intellectual—the village Brahmin whose mentality stamps most Sanskrit literature directly or indirectly—concentrated upon the almanac, not the succession of years. Records were useless and difficult to keep on the available materials; the all-pervading ritual had been reduced to formulae and verses memorized by the elect. Only to a court-recorder like Kalhaṇa or to traders (mostly Jain) did annals or registers mean anything. If the village seems to exist from 'time immemorial', it is only because the memory of time served no useful function in the village economy that dominated the country. Brahminism, like other sacerdotal groups in ancient Egypt and Mesopotamia, proceeded by claiming scriptural or divine sanction 'from the remotest antiquity' for whatever innovation was thrust upon the priestly class. Changes of government and the general spread of village cultivation would have worn down to approximately the same elementary pattern a village founded in AD 1350 as one of 250 BC. This may be seen by comparison today with its neighbouring villages of Sopārā (Śūrpāraka); or of the hamlet of Ḍomgri (on Salsette island, opposite Bassein) which should be the *Dounga* of Ptolemy, and probably the ancient Dhenukākaṭa.[1]

A change of the utmost historical importance is in the relation of the ideological superstructure to the productive basis; what had been an indispensable stimulus at the beginning became a complete hindrance by absolute stagnation at the end. Marx noted only the backwardness engendered by the caste system, the grip of the most disgusting ritual such as worship of the cow, cobra, monkey, which sickeningly degraded man. On the other hand, without these superstitions assimilated by Brahminism at need (e.g. *Rāj.* 1.182–6 for the Nāga cults of Kaśmīr; Stein's note on the *Nīlamata-purāṇa*), tribal society could not have been converted peacefully to new forms nor free savages changed into helpless serfs—though peace between tribes (whose normal intercourse means war) and change from hunting or pastoralism to agriculture guarantee a decidedly more secure livelihood for the tribesman. Only an imposing ritual, or overpowering force, or modern socialism could have won the savage over. The Indian method reduced the need for violence to a minimum by substitution of religion; caste and the *smṛtis* adopted or replaced totem and taboo with more power than the sword or bow. This avoided large-scale chattel slavery, never important in Indian relations of production as it was in Greece and Rome. Brahmin ritual, moreover, was not just witchdoctor's mumbo-jumbo, but accompanied a practical calendar, fair meteorology, and sound-working knowledge of agricultural technique unknown to primitive tribal groups which never went beyond the digging-stick or hoe. For all his magic cantrips, the Brahmin immigrant[2] into tribal lands was at first an effective pioneer and educator, though inevitably becoming a mere drain upon production. The same emphasis upon traditional superstition eventually became a fetter, completely inhibiting any further advance in the means of production, leading to stagnation with helplessness in the fact of invasion, famine, epidemic, or other disaster. We must note the difference between this later Brahminism and the far earlier type which had developed within the tribe. Alexander's invasion of the Punjab had been resisted desperately by Aryan tribesmen with incitement and full support of the tribal Brahmins, though without cooperation between any two tribes. The later Brahmin had neither tribal nor bourgeois patriotism, looked out only for himself, remaining apart from the rest of the people, and preached the necessity of strong kingship, no matter whose, even when it meant surrender to an invader (*Mbh.* 12.67. 6–7, etc.).

It was impossible for the villages to develop a bourgeoisie; science, transport, technical progress, heavy industry, were impossible too without a basic change which would lead to absolute dominance of commodity production. This came with the British period. The victory of the machine brought with it the missing historical sense; the new universal market created, for the first time, an Indian bourgeoisie and nationalism, as well as bourgeois nationalisms for the people of each cultural-linguistic component.

The nature of the *Arthaśāstra* economy and difference between Mauryan and pre-Mauryan society having been considered in an earlier paper (*JBBRAS*, XXVII (1951), pp. 180–213), I shall concentrate, in what follows, mostly upon the principal changes visible in the Gupta period. Neither empire was founded by foreign invaders; neither is a simple change of dynasty over a changeless basis, as would be clear even if we had nothing more to go upon than the splendid literary developments which include Kālidāsa. Conglomerated villages do not suddenly produce great court poetry and drama without reason. For the rest, it must be confessed that the official and fashionable histories[3] now available, with their emphasis upon names, conjectured dates, changes of dynasty, but complete neglect of what happened to the means and relations of production, would (if the reader takes them seriously) go far to prove the oversimplified proto-Marxian views.

2. *Old Tribes and New*

Excavations at places like Brahmagiri in Mysore State* show chalcolithic remains topped immediately by a Mauryan stratum, followed without intermediacy by a Sātavāhana layer. In the vast slaughter of Aśoka's Kaliṅga war, there is no mention of opposing princes or kings. Elsewhere in the Aśokan edicts only tribal names appear. But he mentions by name the contemporary Greek kings Antiochus, Antigonus, Ptolemaios, Magas, Aleksandros; so it is clear that, except for the Mauryan empire, there was no kingship of the type in India at that time. Pre-Mauryan and Mauryan trade plus the Mauryan conquest gave the necessary impetus to change from tribal chieftainship to absolute monarchy based upon a standing army and regular taxes. Contrast this with the list of Samudragupta's conquests (Allahabad pillar, *F*. 1) where kings far outnumber kingless tribes; for example, nine among many kings of Āryāvarta totally exterminated, another twelve among the many of the peninsula (*dakṣiṇāpatha*) conquered but set up again as feudatories. Kingship which would ultimately lead to feudalism from above was becoming a common local phenomenon by the middle of the fourth century AD, albeit with certain large territorial gaps. Unlike the Mauryans, the Guptas had no known tribal origin. This seems to be the chief reason for special prominence given to the marriage of Candragupta I to the Licchavi princess Kumāradevī, a patent of nobility for the Guptas, who came to power too early to find a *Mahābhārata* ancestor. Much is conjectured as to the Licchavis being a great power in the north, but the epigraphs show only a late and trifling royal house in Nepal, claiming origin from the ancient tribe whose power had been completely broken by Ajātaśatru in their original home Bihar (capital Basarh, ancient Vesālī) by 470 BC. The Brahmins even took the Licchavis as a low mixed caste (*Ms*. 10.22). The *Manusmṛti* takes the Ambaṣṭha (*Ms*. 10.8) to be the offspring of a Brahmin father and

[*Now Karnataka.]

vaiśya mother, the Ugra (*Ms*. 10.9) to originate from a Kṣatriya father and śūdra mother. But the latter was a tribe (cf. R. Fick, *Festschrift Winternitz* [Leipzig, 1933], pp. 279–86), and the former is given as the medical guild (*Ms*. 10.47) as well as a tribe (*Mbh*. 2.29.6). It is clear that militarized tribes headed towards oligarchy (over a conquered population), monarchy, or with growing trade to nationhood; those without weapons could survive only as guilds or castes. Both local and invading tribes (like the later Rajputs) were thus being absorbed into society, at different levels, some giving their name to an entire province.

One important group of tribes nearing extinction was the Nāgas. Nāga kings (*P*. 49, 72) are mentioned twice in purāṇic lists, the second time without names (*P*. 53, 73); the Nāga mark remains indelibly stamped upon proper names. Samudragupta destroyed kings Nāgadatta, Gaṇapatināga, Nāgasena in Āryāvarta proper. Candragupta II (Vikramāditya) married a Nāga princess Kuberanāgā. *Circa* AD 400, we find a *mahārāja* Maheśvaranāga, son of king Nāgabhaṭṭa (*F*. 77). King Saṃkṣobha, son Hastin, gives away (*F*. 25; about AD 538) a village in the Maṇināgapeṭha.[4] The neighbour king Śarvanātha (*F*. 28; AD 512–13) donated shares in a village to a merchant Śaktināga, son of Svāmināga; another share to Kumāranāga and Skandanāga jointly. The *Navasāhasāṅkacaritam* mentions cobra (*nāga*) guardian deities of important central Indian cities like Dhārā. We see how the assimilation proceeded, the tribal origin of the Central Indian city of Nagpur, the reason why the cobra accompanies great Hindu gods like Śiva, Viṣṇu, Gaṇeśa; why the *nāgapañcamī* is so important a festival. The point is that the Nāgas are not alone. To this day, some Nāga tribes survive in Assam, Burma, and beyond the frontier; but so do many other tribes in Assam, Bengal, Bihar, Chota Nagpur, the Western Ghats, the Nilgiris—i.e. wherever regular farming and settlement by the village system did not pay. The major historical change in ancient India was not between dynasties but in the advance of agrarian village settlements over tribal lands, metamorphosing tribesmen into peasant cultivators, or guild craftsmen.

3. *Other Tribes*

Other tribes remain in various stages, often dwindling to royal families, as in the case of the Licchavis, and perhaps the Nāgas in Āryāvarta. Of the nine tribes that paid tribute to Samudragupta, apparently on the same level as frontier kings, the Mālavas (*P*. 54, 74) enjoyed sufficient respect to have their tribal era used as often as the Gupta era; this without mention of any Mālava king[5] as a ruler, hence presumably through Mālava tribal patronage of Brahmins.[6] The widely distributed Ābhīras show all stages of tribal development; ten unnamed Ābhīra kings, and people, unknown in Pāli books, are mentioned in the purāṇas and second century AD inscriptions (*P*. 45, 54, 72, 74, *EI*, VIII, p. 89, Iśvarasena; *DHI*, pp. 185–8). The tribe paid tribute to Samudragupta, and the widespread modern Ahīr caste is generally taken to be its offshoot. The Kharaparikas apparently survived in Damoh district till after the Muslim conquest (*EI*, XII, pp. 46–7). The Ārjunāyanas of the inscription are to be identified with those in the Gaṇapāṭha on Pāṇ. 4.2:53. The Sanakānika tribe in the tributary list, had developed a royal feudatory house (*F*. 3) with the hereditary title *mahārāja*, by AD 401–2. The Varika king Viṣṇunandin (*F*. 59) set up a sacrificial post in Mālava *saṃvat* 428 = AD 372–3 on which three royal ancestors in the direct line are given. Five tribal-oligarchic nations in some sort of diplomatic relations with Samudragupta were powerful enough to be ranked apart, presumably as invading rulers; the Daivaputras, Ṣāhīs, Ṣāhānuṣāhīs, Śakas (*P*. 45, 46, 72), Muruṇḍas (*P*. 46, 47, 72). The Śakas had later to be defeated in battle by Candragupta II. The Ṣāhīs and Ṣāhānuṣāhīs were presumably Scythian invaders assuming the title from Sassanian kings, and might have been the lot invited by the Jain *ācārya* Kālaka; other such tribal invaders were the Hūṇas (pp. 45–7, 72) who fought against many Indian kings and were eventually absorbed without trace though more slowly than the Puṣyamitras defeated by Skandagupta. The Muruṇḍas ranked high in the scale of importance and respectability, for king Śarvanātha's mother (*F*. 28, 29, 31; *circa* AD 516–34) is queen Muruṇḍasvāminī[7] or Muruṇḍadevi i.e. the Muruṇḍa princess, no other personal name being given. The Yaudheyas (Pāṇ. 4.1.176, 5.3.117), supposedly exterminated by Rudradāman (*EI*, VIII, p. 44), had formerly no royal names on their coins; in the Gupta period they elected, or at least assented to, (*puraskṛta*) a king-commander *mahārāja mahāsenāpati* who could set up his own inscription (*F*. 59). If the Yaudheyas are to be taken as the modern Johiyas (*DIII*, p. 44) of Bahawalpur on the Sutlej, the tribe-caste survived the institution of kingship.

The Vākāṭaka name is known only through a royal line (*F*. 53–6 et al.; *P*. 50, 73 Vindhyaśakti) but they seem originally to have been a tribe also. The Vākāṭaka king Rudrasena II married Prabhavatīguptā, daughter of Devagupta (= Candragupta II) and Kuberanāgā, which is taken as showing the immediacy of these kings to the Gupta empire; that such alliances at the time freed the lesser king from the last remnants of tribal restrictions has usually been ignored. Under tribal law, marriage with a stranger would not be legitimate without special adoption into the tribe;

a tribal chief had only the rank of first among peers, whether his father had been king before him or not, the real power vesting in tribal assemblies till such a period as inequalities between individual tribesmen's wealth become too great for tribal institutions. The Maukharis (*F*. 47.51) were originally tribal kings whose rule became paramount in northern India after the Guptas. Their tribal origin and the remnants of tribal right are proved by the fact that Harṣa Śīlāditya, even when he had the most powerful army of his day and was in fact the ruler, had to undergo the formality of election to his deceased Maukhari brother-in-law's throne. Actually, he assumed power jointly with his widowed sister Rājyaśrī, at least in the beginning of rule over Maukhari domains; which is not to be interpreted as evidence of republicanism in ancient Indian monarchies (*pace* Jayaswal) but assent to the rule of a stranger by the leading Maukharis, who counted as nobles of the former court. Harṣa succeeded to his brother's kingdom without question or election. Clearly, almost every tribe of any power or importance had developed kingship by the Gupta age. The kings did not always outgrow tribal restrictions, or develop an outlook broader than that for which society beyond tribal limits hardly exists. The pride, prejudices, heroic inconsequence, and absolute political incapacity (*DHI*, p. 132) of every little Rajput clan at a critical period of Mohammedan aggression are clear symptoms of inability to see beyond the tribe. This restricted vision explains *jāti* endogamy, exclusiveness, and why so many of the surviving non-military tribes, when in close contact with developed Indian society, became 'criminal tribes'; stealing from anyone not a member of the gens is no crime in tribal law, often a simple duty.

4. *Forest Tribes*

Forest tribes also continued to exist in spite of the aforementioned adaptation and change. Gupta records pass the Bhīl or Bhilla tribesmen by in silence, but the purāṇas mention seven Gardabhila kings (*P*. 45, 46, 72) though the accepted variant is Gardabhina (e.g. Bhinmāl = Bhilmāl). The other seems preferable from the story of Kālaka where the king who abducted the ācārya's sister, the nun Sarasvatī, for his harem and lost his life in the following invasion, is named Gardabhilla; I attach special importance to the termination. This is related to the legend of Vikrama (son of a Gandharva transformed for a while into a donkey *gardabha*) who later drove out the invaders. The more primitive Bhīls survived as tribesmen, because of their superior prowess as archers, but aversion to the plough. Their labour, way of life, and beliefs now approximate more and more to those of the ordinary Kuṇabī agriculturist.

The explicit mention of unnamed forest tribes is found in Samudragupta's *praśasti*, where the emperor is credited with having reduced all the forest kings to servitude: *paricārakī-kṛta-sarvāṭavika-rājasya*. The territory of these 'kings' lies predominantly in what is now Bengal, Orissa, Central India; there was no question of the densely settled portion of the Gangetic plain relapsing into tribal forms of production. But we know that besides the territory between the Narmada and the Jamuna, all the eastern frontier and the whole peninsula had their full quota of tribes too.

The process of absorption was varied, apart from direct conquest. The passage of tribes into guilds or castes may be seen from our *Census* reports. I am concerned here only with early historical evidence for assimilation. In general traders and Buddhist missionaries penetrated tribal areas long before their formal, thinly held conquest by the Mauryans. The Brahmin Bāvarī (Malalasekera, *Dict. Pāli Proper Names*, II, 279–80) had founded a *gurukula* on the Godāvarī river even before his conversion by the Buddha. This intercourse led first to accumulation of wealth by trade for some tribes, knowledge of better weapons and improved military tactics; later to farming and civilization. Thus in the trade period we find support to wandering almsmen in the form of cave retreats or monastic foundations which craftsman, merchant, and king endowed so generously. The connection of Jainism with trade and dissemination of Buddhism along trade routes are well documented. In the settlement period which we shall mainly consider, the emphasis passed to the Brahmin, with royal village endowments to Brahmins or temples managed by Brahmins.

King Hastin (*F.* 25) is called ruler over Ḍabhāla and the 18 forest kingdoms, reminiscent of the modern Aṭhārāgarh about Sambalpur. He gave donations to Brahmins like any other contemporary. His case is peculiar in that he claims descent in the *nṛpati-parivrājaka* 'royal ascetic' line. Though many kings are supposed traditionally to have taken to the ascetic life in old age, that would not suffice to give the label to Hastin's family. The correct interpretation seems to be that some ascetic going into the wilderness acquired special respect from the tribesmen, married into the tribe, aggrandized its power as king, and so founded the dynasty. Something of the sort is recorded of the very rich, powerful, cultured Indian kingdom of Cambodia; the founder was Kauṇḍinya, an Indian adventurer of high caste and considerable skill with the bow who married the aboriginal (*nāga*) princess Somā that ruled the local tribe, thus starting the kingdom which has left such magnificent architectural remains. That Brahmins took consorts from the aborigines or śūdras is known; the poet Bāṇa had two *pāraśava* half-brothers, so begotten. Lokanātha in Bengal, proud to claim such descent from Brahmins through Śūdra women, (*EI*, XV, pp. 301 ff.) was independent enough to defeat armies sent against him, and to make landgrants to Brahmins on his own account. It is only with fixed regular village settlements that the full rigidity of caste develops. Dharmadoṣa is supposed to have kept his kingdom free from all caste intermixture *vihita-sakala-varṇasaṃkaram* (*F*. 35) as in the golden *kṛta* age, but is himself suspected of mixed Brahmin-Kṣatriya ancestry. The prize example of Brahminism adjusting itself to reality and coming to terms with local customs is in Malabar, where the patriarchal Nambūdiri Brahmins regularly beget children for the 'Śūdra' matrilinear Nair caste whose chiefs count as Kṣatriyas, and which retained all political power. An example in the opposite direction is of king Mahāśiva-Tīvararāja (*F*. 81) who describes himself as a *parama-vaiṣṇava* of the Pāṇḍu line and grants land to Brahmins after worshipping them; but the family was of Śabara lineage[8] (*Arch. Sur. Ind. Rep.*, XVII, pp. 25 ff.), a forest tribe without a doubt. The Ikṣvākus of southern Kosala (Bilaspur and southern neighbouring districts) would similarly claim descent from Rāma, shedding their undoubtedly low origin with the help of Brahmins who were ever willing to rewrite their own purāṇic records for such purposes. A recognized method whereby a sufficiently wealthy king might acquire the formal superiority of higher caste over his fellows was the *hiraṇya-garbha* rebirth ceremony described in the purāṇas and mentioned in royal inscriptions (*IA*, XIX, pp. 9 ff.; *EI*, XVII, p. 328; XXVII, pp. 8–9, etc.). The golden 'womb' from which the 'rebirth' took place went to the officiating Brahmins as their fee.

King Mayūraśarman's personal history as recorded on the Talagunda pillar (*EI*, VIII, pp. 24–36; cf. also *Arch. Survey Mysore*, Report 1929, pp. 50–60, for the doubtful Candravalli inscription) appears romantic but is undoubtedly veridical, not to be compared to the interesting myth of epigraphs by much later Kadambas who also claimed him for ancestor under the Kṣatriya termination, Mayūravarman. The hero, who may be placed in the fourth or fifth century, has a totemic connection with the Kadamba tree (stanzas 7–8 of the inscription), which gave its name to the whole line as the horse did to the Sātavāhanas.[9] He went from his native forest with the preceptor Vīraśarman as a Brahmin student, to enter a charitable foundation (? *ghaṭikā*) at the Pallava capital, Kāñcī. There he had a quarrel with some cavalry officer, took to arms, made himself lord of all the forest territory extending to the very gates of Śrīparvata, and levied tribute from minor chiefs including the Bāṇas. Successfully ambushing a Pallava expedition sent against him, he came to terms with the

Pallavas as a semi-independent feudatory, to be invested with land stretching to the western ocean. His descendants intermarried with the Guptas, Gāṅgas, and Vākāṭakas. According to the *Sahyādri-khaṇḍa* of the *Skanda-purāṇa*, he was responsible for importing northern Brahmin settlers to the coast about Goa. This was unmistakably the introduction of a new village system in wild country, whose results may still be discerned in the remarkable profit-sharing communes of Goa.

The position of the Brahmin (whether immigrant or risen from tribal priests) as tool for change of status is not to be doubted; he traced not only the theological but the real foundation of absolute monarchy by helping form the defenceless, agrarian, non-tribal village, first providing social contact beyond the tribe.

5. *Caste as Class*

Caste as class on a comparatively primitive level of production after the agrarian settlement is also easily proved. Transition from tribe or guild to caste means primarily enrollment of the group on a hierarchical scheme of general society, under Brahmin sanction. Group endogamy, exogamous septs, tribal cults, and even the name generally survive, with Brahminization of myths and observances. The relative occupational, social, and economic position of a *jāti*, with respect to the rest of the environment, coincide—allowing for historical changes—except for the Brahmins, whose pretensions are higher (because of their key position) than their wealth. Our scriptures always prescribe lesser punishment for the offence of a man of higher caste towards a lower, than the reverse. The primitive king can rise above tribal restrictions only when he becomes independent of tribal property, which means only after the predominance of village economy. The process may be traced even in 'Aryan' sources, right from the Vedic age, though there the development of classes as well as agriculture took place within the tribe, and led to the four-caste theory after the first *Ṛg-vedic* division into two *varṇas*, ārya and Śūdra. For the extraneous tribal recruits in the period we consider, we have only a few Brahmins and a great many Śūdras, both subdivided into innumerable local castes. It is of the utmost importance to recognize the difference between this later, generic, nominal Śūdra and that of the *smṛtis*, which continue to use the word in a traditional sense. Modern usage, for example, would consider as Śūdras virtually all the low 'mixed castes' in the *Manusmṛti*, e.g. *kaivarta*. Yet the very fact that these tribal guilds or castes were there not called Śūdras but labelled as a special mixture proves that the real, traditonal Śūdra was originally quite distinct from the later collective name for all working castes; we shall prove that he faded from the scene, with a few local exceptions. The complicated, inadequate, self-contradictory theory of new castes by intermixture of the old four was the early Brahmin reaction to the adjunction of tribes and guilds; so also was allowing repeated hypergamy to change aborigine or Śūdra even into a Brahmin (*Ms*. 10.84). Both these tolerant rules vanish after developed village settlement, in spite of the *śāstras*, as official practices.

Let us first note a few of the innumerable survivals that attest primitive tribal origin. For example, the name[10] Ḍombhigrāma (*F*. 38, AD 571) can only have derived from a settlement of Ḍoms or some such tribe-caste. Similarly, the ending *pallī* (cf. Vyāghrapallikā, Kācarapallikā, *F*. 31, AD 533) shows origin as a tribal settlement, which is the meaning of the word in the *Kathāsaritsāgara*, and in many classical Sanskrit verses. In AD 490–1, Vyāghrasena's Surat plates (*EI*, XI, pp. 221–2) grant the village of Purohitapallikā to a Brahmin priest; the name would indicate a tribal hamlet infiltrated by at least one *purohita* before the grant was made. Samudragupta defeated, and then restored as feudatory, a king Damana of Eraṇḍapalla in the south; the word *pālyā* or some variant still denotes village in most Dravidian languages but so do other words. *Pallī* in Bengali remains an equivalent for *grāma*, but 'hamlet' is also denoted by *pallī-grāma* which should at first have indicated a village of autochthonous tribal origin rather than be taken as a translation-compound. The component can be picked out of modern village names all over the country, as probably *auli* in Hindi, certainly *valī* in Marathi: Kāndivalī, Ḍombivalī, Borivalī on Bombay island, Maḷavalī, Loṇavaḷā (originally Nānivalī) etc. In the latter cases, the aboriginal element is still to be found in the Kātakari tribe of the neighbouring hills, while the settled cultivator of the adjoining flatland is not racially very different, and certainly not an 'Aryan' conqueror. The essential difference between the two is the failure of the surviving aborigines to take to plough culture or to some craft needed by agrarian society.

The replacement of Aśokan Pāli and Sātavāhana Prakrit by Sanskrit is also a class phenomenon, not due to some racial difference between 'Dravidian' and 'Aryan'. The classical idiom and the Brahmin ritual that accompanied it mark a ruling class whose ultimate racial and tribal origin might be much the same as of the local Śūdra cultivators over whom it now manifested superiority by caste and by knowledge of Sanskrit, though founded upon private property and monopoly of arms. Sanskrit helped create a class solidarity beyond the locality.

The thesis is as follows in broad outline: Where the original plough-farming communities were started by nothern immigrants, attracted labour from the surrounding tribesmen, bred rapidly because of the increased food supply to throw out colonies, the region and its language are now Aryan. Where the local population sent forth people who returned with the new knowledge—often becoming Brahmins in the process—the area remains Dravidian. Where the new way of food production was not adopted at all, we still have the aboriginal tribesmen. Differences shown between adjacent groups by anthropometric measurements need not be called 'racial', as selection, diet, long inbreeding would account for them quite as well. The linguistic conclusion, that Austro-Asiatic Muṇḍā-speaking people were driven to the hills by Aryan or Dravidian conquerers who colonized the plains, implies the same relative population of the two regions as at present, ignoring variations in the food supply due to different methods of food procurement. The most densely settled Indian plains of today (except the Punjab) were cleared of heavy forest only after iron tools came into common use, with regular agriculture as the basic method of food production. A glance at the stone-age population of New Guinea shows that our hills, amenable to slash-and-burn cultivation, would have been more populated than the rest of the land when food-gathering was first supplemented by food production.

Survival of primitive ritual is to be seen not only in the quite rare practice of *satī* (a Kṣatriya rite) attested from the time of Alexander, (also *F*. 20, AD 510; and Harṣa's mother) and Nāga worship but in the many local gods assimilated to the cult of some major Hindu god such as Viṣṇu or Śiva, or just worshipped as a cacodaemon (*vetāla*) by both Brahmin and non-Brahmin. One of the later land grants is of exceptional interest in this connection, as the beneficiary may, for once, not have been a Brahmin, no name or *gotra* being mentioned. The Rājapura copper-plate grant of king Madhurāntakadeva, dated 5 October, AD 1065 (*EI*, IX, pp. 174–81) seems at first sight to follow the usual pattern, in somewhat worse Sanskrit than the average charter, but with the normal imprecations of Brahmin-killing sin, etc. against those who might wish to rescind the grant of 70 *gadyāṇakas* of gold, and of a village. The nameless priest is described as a *meḍipota* and *churikameḍipota*, the chief of twelve such *pātras* (fit persons). The conclusion is (p. 177) that he performed human sacrifices, being the ancestor of those known, as late as 1884, as the twelve Melliahs in the same locality (Bastar state), whose land grants obliged them to furnish a human victim from their own families in default of any kidnapped for the ritual; the 1901 Madras *Census* reported 25 Meriahs, 'reserved for human sacrifice'. The king describes himself as of the Nāga lineage, making the gift 'for the good of all creatures' with unanimous agreement of his queen Nāgala Mahādevī, prince Nāika, the Nāyaka Śūdraka, prince Tuṃgarāja, and the *śreṣṭhin* Puliama. This shows how the most primitive superstition had learned to simulate Brahmin forms, claiming Brahmin fees and class-privilege. It would prove that, for all its backwardness, Brahminism was more humane and civilized than the gruesome cults it replaced in the deeper jungle (cf. also *DHI*, p. 229 footnote, Gāṅga custom of voluntary decapitation). The matter is not simple, except as a general statement; the completely Brahminical *Kālikā-purāṇa* (71.18–19; 71.114–16, etc.) which belongs to the period AD 500–1000 according to P.K. Gode, and known practices of the Ojhas (Nesfield, pp. 63–5) show a few Brahmins shedding human blood at the sacrifice, and primitive sacrificers of human beings turning into Brahmins. The offering of one's own flesh, as also the sale of human flesh (*mahāmāṃsa*) appear as contemporary practices on desperate occasions, in the *Harṣacarita* (pp. 153, 199, 224).

One survival or adoption is the cult of the Mothers whose temples were built with due respect to their dreadful attendant Ḍākinīs (*F*. 17; *Rāj*. 1.122, 1.133–5, 5.35). The construction of such a temple with that of Skanda (*F*. 10) might pass, but with that of Viṣṇu (*F*. 17) is striking, inasmuch as Vaiṣṇavism has no place for the Mothers. The *Harṣacarita* locates Bhairavācārya's forest refuge near one such temple (p. 102), and mentions the custom of throwing the *piṇḍa* oblation for the Mothers into the darkness (p. 223). At the same time, donations are still being made to the *vihāras* (e.g. Vainyagupta's Gunaighar grant of AD 506. *IHQ*, VI (1930), 45–60) but the *vihāra* monks no longer pioneer into the wilderness, nor preach in villages, preferring to stay in the monasteries. The *Niṣāda* gotra reported by the Gaṇapātha on Pāṇ. 4.1.100, though not in any of the standard gotra lists, would not be possible unless some Brahmins had been adopted from aboriginal priests or had served the aborigines as priests. We thus have two processes working simultaneously. First, the kings use Brahminism and village settlement to make themselves independent of tribal usage and tribal economy, and to introduce caste as a regular class structure into their territory; secondly, the Brahmins themselves accept all sorts of local superstition, ritual, worship, even service of guilds, becoming a cartilage group which secured the adherence to society of elements that would otherwise have been antagonistic. This adherence was thus secured by an extension of the caste system with the minimum of force, without chattel slavery or villa-manor feudalism, at the price of perpetuating primitive belief and observances to maintain the class structure.

For example: Gotamīputra Sātakaṇi, 'The unique Brahmin', who 'lowered the pride of the Kṣatriyas and stopped caste intermixture' (*EI*, VIII, pp. 59–60) nevertheless married off his son Vaṣiṭhīputra Puḷumāyi to a Śaka princess, apparently Rudradāman's daughter (*ITM*, pp. 216–18). That princess seems to be responsible for the only Sanskrit inscription of the Sātavāhanas. The Maukhari Śarvavarman boasts of his great-great-grandfather (who could only have been a tribal chief) as employing his sovereignty to impose caste-rules: *varṇāśrama-vyavasthāpana-pravṛttacakras* (*F*. 47); much the same phrase is used to describe his own father by Harṣavardhana who was a Buddhist, but no less an Indian king! Saṃkṣobha (*F*. 25, AD 528–9) proclaimed himself *varṇāśrama-dharma-sthāpana-nirata*, while his father Hastin (*F*. 21) was *atyanta-deva-brāhmaṇabhakta*; in view of the peculiar origin of this *parivrājaka* royal family, the love for Brahmins cannot be gratuitous. Caste here means class, tending to rigid endogamy.

Caste rules were fluid in practice till settlements no longer spread but began to ingrow. *Fleet* 16 mentions a temple of the Sun founded by two *kṣatriya* merchants Acalavarman and Bhrukuṇṭhasiṃha. The Brahmins themselves very rarely performed Vedic animal sacrifices, for their charters name (*F*. 38–9) the five great sacrifices (against the quite explicit *Śatapatha-brāhmaṇa* tradition) as *bali, caru, vaiśvadeva, agnihotra* and *atithi*, now become quite simple and non-killing. The *Manusmṛti* (3.164) forbids the invitation to a feast for the Manes, of any Brahmin who served Śūdras or tribal organizations: *gaṇānām caiva yājakaḥ*. The later Nārada[11] gives detailed rules about the division of profits for a craftsmen's guild or association, which means that the Brahmin had become the arbiter in such divisions, hence presumably the guild priest and depositary of guild law. Specifically, we find a guild of fine-cloth weavers (*F*. 18, *silk* weavers, but the translation of *paṭṭa* by 'silk' is not clear to me), immigrants from Lāṭa *viṣaya*, repairing a temple of the Sun at the city of Daśapura (Mandasor) in AD 473–4, which they had built a generation earlier. The priests of the temple would certainly be Brahmins, and the hired poet Vatsabhaṭṭi (taken as a local imitator of Kālidāsa) who composed the graceful Sanskrit verses of the epigraph was presumably a Brahmin too. In *F*. 16, the Brahmin Devaviṣṇu (AD 465–6) makes a donation to the oilmen's guild headed by Jīvanta (*jīvanta-pravarāya*); to be their absolute property even when they moved away, on condition that they remained united and supplied oil in perpetuity to a lamp in the Sun temple at Indor (Indrapura). Note that the weavers' guild implies commodity production on a considerable scale, that the weaver is not a simple village artisan, and that the merchants as well as the mobile oilmen's guild imply trade in commodities. The guild weavers of *F*. 18 possessed skill with weapons, and cultural attainments quite impossible for the caste weavers (like the Sāḷī and Koṣṭī of Maharastra) of later, cataleptic village society.

There is more to this than 'mere' caste division. The Kāyastha caste continues to develop during the latter part of this age, from royal scribes who themselves stem from many diverse castes, having charge of the records (*Naiṣadhīyacaritam*, 14.66; *EI*, XXIV, pp. 109 ff.; *IA*, LXI, p. 49). That is, a caste forms here out of a profession, not a tribe nor even a guild. The reason for this caste stratification is the new productive basis, which had led to relations of production between groups, higher than in the tribal stage but with still primitive tools. Thus we have a tenet of Brahminism for state policy (*Ms*. 8.41) that each caste and subcaste (*jāti*), tribal district (*janapada*), guild, and even large family group had to be judged by its own particular laws, obviously because it was then a unit of production. Therefore the state could not uniformize the juridical structure within groups, but only regulate transactions between groups. The *Arthaśāstra* regulated and taxed everything, allowing this latitude only for inheritance (*Arth*. 3.7, end), because the state was then itself the greatest entrepreneur, tolerating no dangerous competition. As the basic production becomes more and more local, i.e. commodity production per capita goes down with increasing density of village settlement, the functions of a central government would become less and less essential, dwindling to tax-collection and matters like irrigation, beyond the scope of a single village. The break-up of the Gupta and succeeding empires is due to the increase of village units—almost paradoxically to the increase of prosperity—which led to feudalism from above. That is, the new chiefs of recognized tribes, local administrators, and an occasional petty invader use the increasing village produce to turn themselves into independent raider-kings. Defeat in battle means at most that the loser or a substitute continues to rule over his original domains as subordinate to the conqueror. But his ambition, or that of his successor, and of newer princelings remains unaffected while the functions of the central government are progressively impaired. This state of affairs is replaced still later by feudalism from below, by which I mean the stage where land is held by armed, local, feudal, tax-collecting agents, usually over a village (but often simultaneously land-owners within one or more villages), responsible only to a higher feudal lord, not to the village assembly over which they now wielded judicial and administrative powers. This takes place in general during the Mohammedan period (even outside territory held by the Muslims), except in Kasmir where the village settlements could not be dense nor their headmen disarmed, and which consequently developed it well before the Muslim conquest, during the struggles between king and local Ḍāmara chieftains. Of course, as Marx noted, the complete break comes only with age of machine production, following British conquest. The new means (and classes) of production are demolishing caste rules, particularly in the industrial cities as was brilliantly foretold by Marx a century ago.

NOTES

1. E.H. Johnston, *JRAS*, 1941, pp. 208–13. The older identification of Dhenukākaṭa with Dharnikota in the Guntur district (near Amaravati) seems based upon a Dhānyakaṭaka in the Mayidavolu copper plates of the Pallava Yuvarāja Śivaskandavarman (*EI*, VI, pp. 84–9). So many Dharnikota donors coming to Karle, Nasik, Kanheri right across the peninsula would be unaccountable. Dhenukākaṭa must have been on or near the west coast, convenient to the trade routes to all these places.
2. *DHI*, p. 182: 'Cette conquête se continue à l'époque historique, notamment comme au Bengale, par l'installation de colonies Brahmaniques dotées par les souverains.' Many Brahmins immigrated without royal invitation. The 'conquest' is not merely spiritual, but economic and sociological as well. It is, in fact, the real Aryan conquest, if the term has any meaning at all.
3. Beginning with Vincent Smith's *Oxford History of India* (with its praise for 'strong' empires of all sorts) and finishing as of 1954 with the Bharatiya Vidya Bhavan's *Age of Imperial Unity* and *The Classical Age*. These books start with an incredibly slender foundation of valid data, on which an imposing superstructure of conjecture, mere verbiage, and class-fashions is erected; of course, the class is no longer the British but the Indian bourgeoisie, which strives desperately to produce a history as 'respectable' as that of the foreigner in his own country.

   The general reference works are *Ms.* = *Manusmṛti*; *F* = inscriptions by number in J.F. Fleet, *Inscriptions of the early Gupta kings and their successors* (Corpus Insc. Ind. III; Calcutta, 1888); *P* = F.E. Pargiter's *Purāṇa Text of the Dynasties of the Kali Age* (Oxford, 1913); *EI* = *Epigraphia Indica*; *IA* = *Indian Antiquary*; *JRAS* = *Journal of the Royal Asiatic Society*; *IHQ* = *Indian Historical Quarterly*. Besides these, I have made use of the Nirnaysagar edition of the *Harṣacaritam* and the English translation by E.B. Cowell and F.W. Thomas (Or. Trans. Fund New Ser. VIII, Royal As. Soc. London, 1929); W. Norman Brown, *The Story of Kālaka* (Washington, 1933) and the article *Ārya Kālaka* by Muni Kalyanavijaya, *Dvivedi Abhinandana Grantha* (Allahabad, *Sam.* 1990), pp. 94–119; *Rāj.* = Stein's translation of the *Rājataraṅgiṇī*; L. de la Vallee. Poussin: *DHI* = *Dynasties et l'Histoire de l'Inde* (Paris, 1935) and *ITM* = *l'Inde aux Temps des*

Mauryas (Paris, 1930) for an excellent précis of the facts without verbose conjectures. For the Chinese travellers, S. Beal's *Buddhist Records of the Western World* (2 vol.; London, 1884); J. Legge: *Record of Buddhistic Kingdoms* (Oxford, 1886); H.A. Giles: *idem* (Cambridge, 1923), K.P. Jayaswal's *Hindu Polity* (2nd ed. Bangalore, 1943) gives many conjectures which seem ill grounded, and A.S. Altekar's *History of Village Communities in Western India* (Bom. Uni./Oxford, 1927) contains little history except in the title; both of these have been left out of the discussion. The edition of Marx and Engels' scattered writings on India is undated, being no. 4 of the Socialist Book Club's series printed at Allahabad, between 1934 and 1938. Neither the editor (Mulk Raj Anand), nor those who read through the booklet before publication (Edgell Rickward, Jawaharlal Nehru, Sajjad Zaheer, P.C. Joshi, Z.A. Ahmad), nor foundation members of the Book Club like M.R. Masani, Jayaprakash Narayan, R.M. Lohia, Narendra Deva saw fit to warn the reader that these selections would be completely misleading without proper study and grasp of later work on primitive societies by the same authors. R.C. Majumdar's *Corporate Life In Ancient India* (Calcutta, 1918) and Radhakumud Mookerji's *Local Government In Ancient India* (Oxford, 1920) possess the merit of coming down to reality with epigraphic records, in place of the usual *veda purāṇa* speculations; but these scholars lost sight of all historical movement, thrusting everything upon 'Ancient India' indiscriminately, without regard to tribal life and developments stemming from it, or to the element of decay that is quite palpable when closed, self-sufficient village economy becomes the simple norm. Besides the decennial Indian *Census* reports, useful summaries are to be found in E. Thurston & K. Rangachari: *Castes & Tribes Of Southern India* (7 vol., Madras, 1909); H.H. Risley: *Tribes & Castes of Bengal—Ethnographic Glossary* (2 vol.; Calcutta, 1891) shows a touching faith in the lower nasal index for Aryans as against the Comtism of J.C. Nesfield's: *Brief View of the Caste System of the North-Western Provinces and Oudh* (Allahabad, 1888); neither book is to be trusted in its theories; R.E. Enthoven: *Tribes & Castes of Bombay* (Bombay, 1920; 2 vol.) was the last book of the series, as that of D.C.J. Ibbetson: *Report on the Census of the Punjab*, vol. I (Calcutta, 1883) seems to have been the first. The studies of S.C. Roy and Verrier Elwin on the tribes of Chota Nagpur, and the cautious work of J.H. Hutton: *Caste in India* (Oxford-Bombay, 1951) show the connection between tribal and caste observances with less theorizing than the pioneers. A.M. Hocart's *Caste* (London, 1950) is pure theory undiluted with reality. K.A. Nilakanta Sastri's *Studies in Cola History and Administration* gives a picture of the southern *sabhā*.

4. For the survival of the Maṇināga cult, D.C. Sircar, *EI*, XXVIII, pp. 328–34, particularly in Orissa; Lokavigraha-bhaṭṭāraka ruled (AD 600) *Tosalyāṃ sāṣṭādaśāṭavirājyāyām*. As for the prevalence of the Nāga cult, it is not necessary to postulate a 'wide-spread pre-Aryan Nāga civilisation.' It would suffice if unassimilated Nāgas were steadily driven beyond an expanding periphery of 'Aryanization', there to act upon even more savage tribal people. Note that later, descent from a Nāga-kula is regarded as a good substitute for genealogies going back to the epics.

5. A.S. Altekar, reading the Nandsa sacrificial *yūpa* pillars in *EI*, XXVII, pp. 252–68 presents us with an illogical *king* Śrīsoma of the 'Mālava republic', though the word for king is nowhere to be found in the text he gives on p. 264, facing his English version. Possibly, the royal office and title has been conjectured from the *rājarṣi-dharma-paddhati* of p. 263; a *mahāsenāpati* is to be found on the third of these pillars (p. 267).
6. In older days, they could even have left a Mālava *gotra* among Brahmins, as did the Bhṛgu, Vaikarṇa, Purukutsa, and other tribes (*JBBRAS*, XXVI, 1950, pp. 21–80). The Udumbaras are known as a tribe by their coins and other, literary records; the name survives as a Viśvāmitra *gotra*, though it was also the Kaśyapa poet Bhavabhūti's family name. This tribe (Kāśikā on Pāṇ. 4.1.173 tribe; 4.1.99, gotra) has been left out of the main discussion, in spite of an excellent totemic name, as it would take too long to discuss J. Przyluski's Austro-Asiatic theory (*JA*, 208, 1926, pp. 1–59). The Śālaṅkāyana dynasty of the Gupta period may bear a tribal name; the tribe existed (Kāśikā on Pāṇ. 5.3.114) and has also left Brahmin gotras in the Bhṛgus, Viśvāmitras, and Agastis, the wide divergence being suggestive of such tribal contact; but the connection between tribe and dynasty should be traced directly, for Brahminism was by now strong enough to lend a *gotra* name to the ruling chiefs of a tribe. On the other hand, even recently, hereditary Brahmin family priests took on the surnames of the non-Brahmin feudal bårons whom they served, e.g. Ghorpade, Amgre, Ghatage, of Maharastra. The 1921 *Census* listed a total of 515 Udumbara Brahmins in the Panch Mahals and Kaira districts of Bombay. The Ābhīras have left no *gotra* among Brahmins, but a sept or subdivision named Ahīr appears among the tailor, shepherds, milkmen, potters, carpenters, goldsmiths, leather-workers and fishermen castes, as also among the present Katkari and Bhil tribes (Enthoven 1.34, 1.157, 2.173, 3.25) as among the true Maratha settlers. With the Bhils, this may be aseribed to the *ahir* fish totem; but for the rest, the most plausible explanation would be contact with the classical *ābhīra* tribe.
7. This compound enables us to dismiss S. Konow's interpretation of Muruṇḍa as Scythian word translated by *svāmin* (*DHI*, pp. 45–6).
8. The śabara lineage of the Pāṇḍuvaṃśīs, though admitted by *DHI*, p. 269, has been disputed—like almost any other detail of Indian history. The point is of little importance, when it is admitted that most such dynasties had an obscure, local, tribal origin. The Nalas seem much more likely to be Niṣādas turned into Naiṣadhas (*EI*, XXVIII, pp. 12–17, particularly p. 15) than actual descendants of the *Nalopākhyāna* hero, if he really existed. The Ikṣvākus of the original line died out with Sumitra of Mithilā, according to the Purāṇas which then go on to make Prasenajit (known to be of low Mātaṅga descent) and the Buddha (a tribal śākyan) Ikṣvākus, so that the Mahānadī aborigines were following a handy method of rising in the social scale to match their new economic status. The Pālas, Bhaumas, and others of the sort had a local origin too. The Pāṇḍuvaṃśīs may be identical with the Pandos of the 1931 *Census*, vol. I, part. 3.
9. I have shown that the proper Sanskrit equivalent is *saptivāhana*, as actually found in the *Kalki* (*Anu-bhāgavata*) *Purāṇa*. Saptikarṇa could then be a split totem. But the Gaṇapāṭha on Pāṇ. 4.1.112 reports names *Tūṇakarṇa, Masūrakarṇa,*

Kharjurakarṇa, Mayūrakarṇa, which do not admit the direct interpretation of Kumbhakarṇa or Jatūkarṇa; thus *-karṇa* may have been a rare patronymic termination. J. Przyluski demonstrated in *JRAS*, 1929, pp. 273–9: *Hippokoura et Satakarni* that *sāta* means horse in the Austric-Muṇḍā languages, *kon*, son; the compound would then indicate 'son of the horse'—possibly the Aśokan Satiya-puta—while the horse does occur on some Sātavāhana coins. This is again a tribal totem, though he nowhere mentions the word totem. There is a still closer parallel between the two tribal dynasties when we note that the Sātakaṇis often claimed explicitly to be Brahmins, as the *ekabamhaṇasa* of Gotamīputra in Nasik cave no. 3 (*EI*, VIII, p. 60). Such bivalent Brahmin-Kṣatriyas are common, particularly in the South, where we have the Māṭūra family of Karnataka, the Sena kings of Bengal (of Kanarese origin), and plenty of others. The Guhilots have the same double caste (*EI*, XII, p. 11; see also D.R. Bhandarkar in *JASB*, V, 1909, pp. 167 ff.), the Candels, and many others. The Pallavas claim descent from the fighting Brahmin Aśvatthāman (the Spatembas of Megasthenes), but modern ethnographers connect them with the present low Pallī caste, or the Kurumbas. Similarly, the Rāṣṭrakūṭas have been associated with the extant Raḍḍi (Kāpu) caste. There are still many groups whose claim to Brahminhood is allowed by some associates, but generally contested by other Brahmins, though there would not be inter-marriage in any case, even if the claim should be universally admitted. The Kadamba tree is still worshipped as a totem by the Gāvaḍās and other Western Ghat tribe castes.

10. We can only mention in passing the Ḍombhī-Herūka of Tāranātha, the Dharmayāna tantric developments in Buddhism, the Dharma cult in post-Islamic Bengal, and the Dharmarāja worship of the Tigalas about Bangalore. The cults spread, not at a high level but among the more primitive people.
11. J.J. Meyer, *Ueber das Wesen d. altindischen Rechtsschriften* (Leipzig, 1927) shows that Nārada is the most altered of all our legal texts, but perhaps much older than believed (pp. 106, 161 ff., etc.). However, he has paid no attention to the difference of emphasis.

18

The Basis of Ancient Indian History (II)*

1. *Rise and Decline of Trade*

Land tenure cannot be expected to show greater uniformity than contemporary society with its varied concepts of property and right within each component caste, subcaste, guild. The royal *sītā* lands of the *Arthaśāstra* were the economic foundation of Mauryan state power; the *Manusmṛti* does not know the word. However, the difference is partly regional. The Chinese travellers mention *sītā* domains in passing (Legge 42–3; Giles 20–1; Beal I, xxxvii–xxxviii and I, 87–8), the rest of the land being tax-free or very lightly taxed. It is obvious that the revenue in U. P. and Bihar would be far less than in Mauryan times, hence that a flourishing state like that of the Gupta emperors would have to derive relatively more income from the south, with its newer settlements and trade. Fa-hien notes (AD 400–1) that the king's bodyguards and attendants all have salaries, Hiuen Tsang (about AD 630) that 'when public works require it, labour is exacted but paid for'. Both of these are survivals of Mauryan usage. But the later pilgrim also reports that 'the governors, ministers, magistrates, and officials have each a portion of land consigned to them for their personal support', which is the beginning of feudalism as is the unpaid corvée. In those two centuries, the populous cities of Magadha were deserted, Patna dwindled to a pair of hamlets, though the Magadhan villages flourished and the land yielded very well; this shows the effect of the new settlements upon the whole economy. The time could not be far distant when the villages, now completely dominating the cities economically, would be reduced to an approximate common status for tax purposes.

Candragupta's general Āmrakārddava (*F.*, pp. 31–3) purchased the village of Iśvaravāsaka in AD 409–10 with money furnished by certain

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members of the royal household and presented it, with the interest of an added sum, to the support of the Buddhist monastic order at Sāñcī. The purchase could only have been for the state, in the sense of compensation to the royal treasury after which the village revenues were assigned to the monastic order by the state; but this must be conjectured, in the absence of any further data about the village, from other grants of the Gupta period in Bengal (*EI*, XV, pp. 130–2, 133–4, 135–6, 138–41, 142–5). Indeed, purchase of any sort is unusual in these charters, and a private owner of that day selling land is unheard of. The Damodarpur plates (*EI*, XV above) do not indicate purchase of plots from the village council by immigrant strangers, as has sometimes been claimed. The payment there is clearly to the state, by a Brahmin or his patron, of compensation at the rate of 3 *dīnāras* per *kulyavāpa*, for the right to cultivate family-size holdings in hitherto unploughed, marginal (*khila*), waste land, without payment of taxes. What had been purchased was freedom (in perpetuity) from taxation by a Brahmin or for a temple-plot, not the land itself; the officials concerned were ultimately responsible to the king. Who paid interest on the extra 25 *dīnāras* donated in cash by Āmrakārddava to feed ten monks and light two lamps forever is not clear, but it would presumably have been some guild, perhaps of merchants, who were such frequent donors to Buddhist monasteries, and on whose repeated alms the great foundations (at the intersections of major trade routes) such as at Sāñcī, Kārle, etc. mainly relied in the absence of any city in the neighbourhood.

This contrasts painfully with the heavy cash outlays made about AD 120 by so many individuals, including the Śaka Uṣavadāta, Nahapāna's son-in-law. That comparatively insignificant lord went through the usual brahminising gestures by giving away 16 villages to Brahmins, endowing the marriages of eight, building ferries and rest-houses at sacred tīrthas. A single donation of his to gods and Brahmins was of 70,000 silver *kahāpaṇas*, the equivalent of 2000 gold *suvarṇas*. He endowed the monks at Kārle with a whole village, but his foodgift to the Buddhist monks of cave 10 at Nasik was a field purchased outright for 4,000 silver pieces from a Brahmin; in addition, he deposited 2,000 and 1,000 *kahāpaṇas* with two separate weavers' guilds, on perpetual loan at 12 per cent and 9 per cent interest to clothe the same monks and to supply them with *kusaṇa* (? travel money; *EI*, VIII, pp. 78–82). Not only the weavers, but guilds of oil-men, potters (? *Kularika*), *Odayantrikas* (hydraulic engineers) then flourished sufficiently to enter into such financial transactions. The fisherman (*dāsaka*) Mugūdāsa had a following—presumably a guild also—prosperous enough to donate a whole cave, no. 8 at Nasik, to the *saṃgha*. Even a *kuṭuṃbika* made the attempt (*EI*, VIII, p. 94), but his funds seem to have run out, as the cave beyond no. 23 at Nasik is still unifnished; however, no *kuṭuṃbika* village settler, passive spectator-tenant addressed by the Gupta or later copper-plate grants, could have even dreamt of such munificence. It seems to me that the carpenter Sāmina of Dhenukākaṭa whose name appears on the verandah pillar in front of the central doorway of the Caitya cave at Kārle (*EI*, VII, p. 53) cannot be a mere workman signing because of some hypothetical, vanished woodwork, but was undoubtedly a substantial donor like all the others whose names are there carved in rock.

The range of patrons, flexibility of caste and occupation, respectable status of craftsman and trader, and even the cheerful, simple, direct expression in a popular language are all strongly reminiscent of the Buddhist *Jātakas*, which independent text-criticism takes as having been fixed far away from Magadha at about this period, say the first-second century AD. In these works parents often discuss the choice of a profession for their son, where Brahmin writings would take the paternal employment for granted, or in case of the 'mixed' caste, assign a new but theologically fixed profession, without choice, by their *smṛti* rules. The argument that earlier reliefs at Bhārhūt, Sāñcī, Amarāvatī represent the themes of Jātaka stories faithfully, and that the tradition must have been centuries earlier still, is not relevant. Neither the glyptic, nor the brief Jātaka verses from which the traditional stories have been expanded say anything about the social milieu which determines the approach, colouring, background of the completed text. This can only be referred to social conditions of the time of writing down the extant versions. Here, not only time but locality and the *class* of people transmitting and patronizing the work are of material importance, as is seen by comparison with another text constituted at about the same epoch, the *Manusmṛti*. This priests' handbook fights bitterly against Brahmins degrading themselves in secular professions (*Ms*. 3.151 ff.), permitted however as desperate expedients (*Ms*. 10.81 ff.), but attested by the Jātakas (cf. Fick: *Sociale Gliederung*, chap. 8) without scorn or contempt as not unusual Brahmin occupations. To become a Brahmin meant at worst going off at a sufficiently early age to some distant place to learn the sacred texts; to make it stick, a share in the surplus was essential, and a type of society that thought it necessary that the hierophant should receive such a share without labour.

A single complex like that at Kaṇherī, or Kuḍā (Lüders *EI*, X, appendix, nos. 984–1066) shows that princes, royal officials, bankers (*seṭhin*), scribes (*lekhaka*), merchants (*negama*), physicians (*veja*), perfumers (*gaṃdhika*), money-changers (*heraṇika*), caravan traders (*sathavāha*), blacksmiths (*kamāra*), iron-mongers (*lohavaṇiyiya*), ploughmen-householders (*hālakiya, kuṭubika, gahapati*), gardeners (*mālākāra*) contributed to the construction, along with guilds even of corn-traders (*dhaṃñika*), bamboo workers (*vasakāra*), and braziers (*kāsākara*). Most of these donors came from some distance, so their payment must have been in cash—something that would be unheard of for the humbler in the list, with a dominant village economy, without share in the profits of a flourishing trade in commodities. Let us note further that Rudradamān finished rebuilding the shattered dam[1] of lake Sudarśana below Girnar to thrice the original size, at his own expense, 'without having plagued the regular town and country settlers with corvée labour, taxes, or voluntary contributions' (*EI*, VIII, p. 44; *apīḍayitvā kara-viṣṭi-praṇaya-kriyābhiḥ paura-jānapadaṃ janam*). He was a ruler of foreign extraction like Nahapāna and Uṣavadāta; but we have numerous private Yavana donors (EI, VII, pp. 47–74) at Kārle and Nasik, with a Śaka or two for good measure, who could have gained their wealth only by commerce. Add to this the discovery of tremendous hoards of silver coins, as at Joghaltembhi (which hoard yielded over 20,000 pieces of Nahapāna and his conqueror Śātakarṇi) and only one conclusion is possible: there was heavy commodity production and trade in a few centres in the Śātavāhana-Kṣatrapa period which intervenes between the Mauryan and Gupta ages. This trade gave rise to comparatively small but rich principalities whose conquest was the main source of profit for the early Gupta empire.[2] When the imperial rule led to steady increase in number of settlements, with nearly selfsufficient village units, trade and commodity production per head decreased substantially. The general incidence of cash transactions and trade would naturally affect the whole concept of private property in land at any given time and place. We have noted Uṣavadāta's purchase of a field at Nasik for 4,000 silver pieces. Richly endowed temples and their administrative bodies tend always to sell or lease some of their possessions, though such a temple is generally a civic, not a rural institution (e.g. Nālūr, K.A.N. Sastri, pp. 85–95). Trade certainly affected the administration of justice as seen from the peculiar Jātaka word *lañca* for bribe, (with the modern idiom *lañcam khādati*, Fausböll II.186) surviving to this day, but unknown to Sanskrit, or earlier Pāli. The ephemeral trade centres of the interregnum are fairly well represented by the list of conquests in Gotamīputra Śātakarṇi's inscription (*ITM*, pp. 216–17): Aśmaka, Paiṭhān, Surāṣṭra, Aparānta (north Koṅkaṇ), Anupa (near Māhiṣmatī on the Narmadā), Berār, Vidiśā, Ujjain, Vejayanti (Banavāsī in North Kanara), and some coastal ports of the peninsula, with undeveloped hinterland. The older centres in the north had already begun to their long, slow decline, with increasingly self-sufficient villages.

Money plays a negligible role in the closed economy of a village with communal production. Taxes were paid in kind, except for the occasional cash crops that had to be traded immediately. The observation that only a part of that surplus which reached the hands of the state became a commodity, to be exchanged as such, attests Marx's unique insight. What has been said about salt, metals, and cloth makes little difference, the quantity needed per village being very small, and bartered for grain. Trade was large only in the aggregate, its density noticeably important only at a few emporia.

2. *Land Grants*

The charters dug up till now are overwhelmingly of land or village gifts made by kings to Brahmins. Merchant recipients share the land-grant in *F*. 28 with Brahmins, presumably for support of the Sun-temple founded by one of them, which would be managed by Brahmins in any case. This again differs from the *Arthaśāstra*, which advises against any but simple *brahmadeya* groves, not transferable; explicitly, against gifts of villages or arable land. Yet there is formal continuity through changed circumstances. The older book devotes an entire chapter (*Arth*. 2.2) to the disposal of unploughable land (*akṛṣyāyāṃ bhūmau*), called there *bhūmi-cchidra*. The principal recommendation is that the land be devoted to elephant-breeding for the army. The chapter begins, however, with the advice that such land can be used for sparse dissemination of untaxed Brahmin Druidical teaching groves—which would not interfere with other uses. This laid the foundations of the very practice that the great text wished to avoid though no cultivator was allowed to shift from taxed to tax-free land. The Brahmins, undoubtedly influenced by the trading environment, managed to get enough cultivators together (in our period, from tribesmen) to start regular clearing and farming, while preserving the original tax-free rights. The charters of the Gupta (and later) age give the land away regularly *bhūmicchidra-nyāyena* 'by the law of the waste land', though the land was then well developed. The only explanation is that it had at one time been waste land, the first new grants only confirming the original *brahmadeya* brought under cultivation by the initial donee's descendants. The legal terminology of the grant survives though the nature of the land and the role of the Brahmin changed. Just as the word *sītā* denotes 'plough-furrow' and thence the royal plough-lands, so *bhūmi-cchidra* might indicate seed-holes made by the digging stick (dibble) in burnt-over forest land. To the end, the Brahmin is not supposed to set his own hand (*Ms.* 10.84) to the plough or metal-tipped digging tools; but we know that, even from Vedic times, the Brahmin kept some cattle, the standard measure of his wealth. Thus, he always had the preliminary requirements for agriculture at his command.

Why Brahmins or temples? Let it be suggested that the Buddhist monasteries had been a civilizing influence, but useless for royal administrative purposes. By the very rules of his order, the monk had no family, caste, property, technique, or productive labour; even the practice of social ritual was forbidden him, as were the incantations thought so necessary by the society of his day. This put him beyond the class division of society. Though that division was not without effect upon his canonical writings (as for example the rich nobleman's Mahāyāna in the north as against the more primitive Hīnayāna of the less developed south), he was unable to compete with the Brahmin in promoting social production, except at the earliest stage of bearing the message of peace to warring tribes, or the brief period when trade was expanding. The rustic Brahmins were a valuable direct support to the new state mechanism that sprang up with increasing settlement of tribal areas, and they helped, as shown above, in the introduction of village settlements. The Brahmin certainly never deluded himself about the class function of caste. *Ms.* 8.148 says: '(The king) should, with force, compel the vaiśya and śūdras to perform their (prescribed) work; for if these two (castes) fell from their duties, this whole world would be thrown into confusion.' State and priest combine in keeping the primary producer to his task, without which neither could find a surplus to share. However, there is, by the Gupta period, one important difference from the *Yajurvedic* caste system. The vaiśya settler (according to our lexica *ārya*, the Aryan par excellence) had formerly been the chief producer of taxable surplus, the Śūdra being a helot; now there is hardly a Vaiśya in sight except perhaps as an occasional trader while more and more tribes are enrolled (mostly as Śūdras of new type) into the general body of society and settled in peaceful, unarmed villages. It seems to me that most land grants would not otherwise have been possible. Our information here is somewhat one-sided, as the average settlement had no charter. But it is known that other villages imitated the structure of the special ones whose records survive in the copper plates. The council (*sabhā*) which decided on behalf of the village was dominated by the shareholders, usually the private landholding class of *kuṭumbins*, among whom there might again develop a class division, as for example the *rāṣṭrakūṭa* settlers of some rather late southern epigraphs. The *kuṭumbin*, equivalent to *gahapati* in the Jātakas, is not called a Vaiśya. There was, besides the *sabhā*, the general assembly of the inhabitants, who either attended the *sabhā* meetings (as in Goa) and made their wishes known without voting, or constituted a separate body like the Ūr of Coḷa settlements. With no force at its disposal, and a low incidence of trade, the ruling class could and need not be as oppressive as in later feudal days; so the earlier village workers had a greater measure of democracy.

Generally, the king grants the right to tax-free cultivation; at a later stage, the village taxes themselves are also given to the donee. The taxes, being usually in kind, amount to a gift of grain. The tax donation conveys no proprietary rights in the land itself, which cannot be sold or alienated as a rule. The beneficiary is not accountable for tax-dues received, nor does he pass on some agreed fraction to the state, as would be the case in later, feudal times. On the other hand, he has not the armed force nor the legal power to extract anything more than the king's share, determined by parochial usage even before the charter. The *Arthaśāstra* would grant only clearance and cultivation rights to fields in state land on condition of paying all taxes. The thief-tax, i.e. fine to be levied when some robbery occurred within village territorial limits but could not be traced, was usually reserved for the state and excepted from the donation; the reason was that the king would in such cases have to reimburse the merchant for the goods stolen. Tribal land is never property, only territory; hence land ownership in the same sense as that of goods is not probable for the new settlements of the Gupta rule, while any claim to bestow occupation rights would vest in the successor to tribal authority, the king. Where the tribe remained as such, we have no example of any land grant at all. The beginning of a peculiarly Indian feudalism is visible in the corvée, here called *viṣṭi*, coming to mean unpaid labour for the king; in the Arthaśāstra it meant only drudge labour, perhaps compulsory but paid at the (lowest) rate of 5 silver *paṇas* a month per man. It now becomes a tax upon the villager; *Ms*. 7.138 allows the king the right to a day's unpaid work per month from all craftsmen and those Śūdras who live by their own labour. Kaśmīr, with its difficult transport, had a special porterage corvée (*Rāj*. 5.172–4; Stein's note, *Rāj*. I., p. 209).

The Vākāṭaka king Pravarasena II (*F*. 55) states, with unusual clarity, typical conditions of such a grant in the early fifth century AD:

> The village named Carmāṅka on the bank of the river Madhunadī, in the Bhojakaṭa kingdom (measuring) 8,000 *bhūmis* according to the royal measure is, according to the request of Koṇḍarāja, son of Śatrughnarāja, given to 100 brahmins of various *gotras* and *caraṇas*. We grant the fixed usage, such as befits this (village), such as has been approved by former kings, of a village which belongs

> to a community of *caturvedins*. Namely, it is not to pay taxes; it is not to be entered by the regular troops or by umbrella-bearing officials; it does not carry with it the right to cows and bulls in succession of production, nor to the surplus of flowers and milk, nor to the pasturage, hides, charcoal, nor to the diggings for purchase of undried salt; it is entirely free from all obligations (to the state) of forced labour; it carries with it the (right to) treasure trove, and the *kḷpta* and *upakḷpta*; it is (granted) as long as the moon and the sun (shall endure), to follow in the direct line of sons and sons' sons. It should be protected and increased by all possible means. Whosoever, disregarding this charter, shall give or cause to be given the slightest vexation, on him shall we inflict punishment together with a fine when he is denounced by the brahmins . . . And this condition of the charter should be maintained by the brahmins and future rulers: Namely (that the grant is valid) as long as the moon and the sun (endure) provided they commit no treason against the sevenfold kingdom (king, ministers, ally, territory, fortress, army, treasury) of (succeeding) kings; that they are not slayers of brahmins, and are not thieves, adulterers, poisoners of kings &c; that they do not wrong other villages. But if they act otherwise, or assent (to such transgression) the king will commit no theft in rescinding the land.

Noteworthy features of this clearly worded but not unusual grant deserve comment. Bhojakaṭa has the appearance of a tribal name. The village is granted in common to a thousand holders, of whom 49, presumably heads of families, are given by name later on. Apparently the Brahmins were already settled in the village, hence must have derived food from its land, before the charter. The net gain would seem to be the right to cultivate with freedom from taxes, and from the royal corvée. The gift is made by the king, at the request of Koṇḍarāja, whose name and ancestry denote a Kṣatriya, perhaps the district governor or commandant, yet one who had nevertheless no power himself to make any such grant.[3] That is, no proper feudal nobles exist, and there is no local lord with manorial holdings in the villages. Certain rights are reserved to the original villagers (not Brahmins) namely common pasturage, cattle and their products, salt and mineral righs. The non-Brahmin villagers in this case at least must have been mainly pastoral, the Brahmins the first systematic agriculturists. It is also clear that the village had no force whatever at its command; any armed action by the village or encroachment upon other village land would forfeit the grant altogether. The emphatic and constantly repeated *a-cāṭa-bhaṭa-praveśyaḥ* proves how thoroughly disarmed the village generally was, so that any royal soldier or official could tyrannize over it at will; immunity from their entry was always a tremendous boon—as it would be to this day. The village had, therefore, no real interest beyond its boundaries, and so could witness the ruin of empires with equanimity while concentrating upon its miserable patch of land.

3. *Fields and Inhabitants*

This should prove the existence of common ownership of most land at the period. But there is also a type of individual right which has to be considered. For example, Dharasena II of Valabhī (*F.* 38) made a gift in AD 571–2 to a Brahmin Rudrabhūti of various plots of land whose measure and precise description are given:

'At the village of Antaratrā, in the Śīvaka *padraka*, 100 *pādāvartas* of land, the holding of Vīrasenadantika, and 15 *pādāvartas* to the west of this; also, at the western boundary 120 *pādāvartas*, the holding of Skambhasena and 10 *pādāvartas* at the eastern boundary; in the village of Ḍombhigrāma, in the eastern boundary, 90 *pādāvartas* known as the carpenter's plot (*vardhaki-pratyaya*). In the village of Vajragrāma at the western boundary 100 *pādāvartas* at the summit of the village and a well, with an area of 28 *pādāvartas*, known as the holding of the Elder (*mahattara*) Vikidinna. In the Bhumbhusa *padraka* 100 *pādāvartas* known as the holding of the settler (*kuṭumbi*) Boṭaka and a well. (The whole of) this (is given) together with the *udraṅga* (tax) and the *uparikara* (tax); with the right to the *viṣṭi*, corvée) as the occasion for it occurs; not even to be pointed at by the hand by any of the king's people.'[4] (Similarly, Dharasena I, AD 525, *EI*, XI, pp. 107–8, 113–14; cf. also *EI*, XI, pp. 80–5).

This shows in the first place the existence of some personal holdings, all rather small in area as a *pādāvarta* is taken to be 'one square pace', say 8 square feet. One of these was originally assigned[5] to the elder (*mahattara*), one to the village carpenter (*vardhaki* as in Vainyagupta's Gunaighar grant *IHQ* VI (1930), pp. 45–60; Fleet takes this as a proper name), as was the known custom in other places. All the plots are in the *padraka*, which means clearly marginal land, as does the unploughed *khila* land of the Damodarpur charters (*EI*, XV, pp. 113–45) not the prime common land under cultivation. The difference between the two is that these *padraka* lands, though described as within the limits of a given village, have separate names of their own; presumably, they were tiny settlements emanating from the main village for ease of cultivation, as yet without separate entity, and may be taken as the equivalent of *vāḍi, vāḍā, pāḍi*, etc. which now terminate so many modern village names. All could be given away by the king, along with any wells constructed therein, without any talk of compensation. How is this to be explained?

This can only mean that the village had a certain amount of common food-producing land besides the pasture, and that the ramaining (*padraka*) land, which would normally be waste, could be cultivated by individuals or groups possessed of the necessary energy; some of this land was assigned (besides their normal perquisites) to certain village workers (*kāru*) or functionaries. But the existence of such individual plots implies the existence of an owning class, and of another that had no such rights. Nevertheless, the title even to this *padraka* land must have vested in the village as a whole, if the right of reassignment could be claimed by the king from the upper class of villagers, whatever it was at the time. The wells were almost certainly the product of communal labour, as probably also the first clearing of the small *padraka* fields; possibly both had been done by *viṣṭi* labour at some earlier period. It must not be forgotten that we are still close to the time of original settlement and forest-clearing; the stage when all tillable land is closely occupied lies in the distant future. Thus we have *Ms*. 9.44: 'the land belongs to him who first clears the forest (for sowing), as does the buck to him who gets in the first arrow'. There can have been no question of any individual just wandering off to clear a patch of land. Either it would be complete wilderness, in which case a group of settlers alone could manage and hence own it; or the lone settler would have to come to terms with the forest tribes. With tribal slash-and-burn cultivation, land would lose its fertility so quickly that a small fixed patch would have no value; such land sown without ploughing has to shift from year to year, making individual title meaningless for tribesmen. If the forest lay within the undeveloped area of some village, the village itself would have to grant the right of clearance, as was generally done even in later settlements of which we have precise knowledge. Thus, king Dharasena was transferring on behalf of the village certain rights of cultivation originally granted by the village. With either the *Manusmṛti* type of title cited above, or later notions of ownership, the grant would be an act of tyranny which not even a greedy Brahmin would dare to accept without the backing of a local police force. We are at the transitional stage where territory is becoming property, leading to feudalism from above while the workers have progressively less ownership rights of any sort.

The question of property in land is touched upon most nearly by 'Three Copper-Plate Grants From East Bengal' (F.E. Pargiter in *IA*. XXXIX (1910), pp. 193–216). Of these charters in sixth-century Brahmi the first is the clearest, and may be quoted in Pargiter's translation (slightly modified):

The leading men of the district (modern Faridpur), who were headed by Iṭīta, Kulacandra, Garuḍa, Bṛhaccaṭṭa, Āluka, Anācāra, Bhāśaitya, Śubhadeva, Ghoṣacandra, Anamitra, Guṇacandra, Kālasakha, Kulasvāmin, Durlabha, Satyacandra, Arjuna-bappa, and Kuṇḍalipta, and the common folk (*prakṛtayaḥ*) were apprised by the agent Vātabhoga thus: 'I wish to buy a parcel of cultivated land (*kṣetra-khaṇḍa*) from your honours and bestow it on a Brahman: therefore do ye deign to take the price from me, to divide (the land) in the district and give it (to me).' Wherefore we, giving heed to this request (and) being unanimous, determined (the matter) by an appraisal by the keeper of the records (*pustapāla*) Vinayasena. There is in this district the rule established along the eastern sea (that) cultivated lands are things which may be sold according to the (rate of the) sum of four *dīnāras* for the area that can be sown with a *kulya* of seed (*kulyavāpa*) and that the evidence of a sale is by the custom of (giving) a copperplate, which custom applies immediately on seeing the counting made for the parcel of cultivated lands of such-and-such-sowing (area), and thereby the feet of the Emperor receive the sixth part (future taxes) (*tacca parama-bhaṭṭāraka-pādānām atra dharmma-ṣaḍbhāgalābhaḥ*), according to the law here. Therefore the agent Vātabhoga having adopted this procedure, (and) having by tendering the deposit (compiled with it) by the act as well as by the intentions of one who has desired to establish the fame of his own merit (and) having paid twelve *dīnāras* in our presence—we, having served (the land) according to (the standard measure of) eight reeds (*nala*, perhaps bamboo here) by nine (per *kulyavāpa*) by the hand of Śivacandra, have sold to Vātabhoga a triple *kulya-sowing* (area) of cultivated land in Dhruvilāṭi by the custom of the copper-plate. This very Vātabhoga, who desires benefit in another world as long as (this land) shall be enjoyed, while the moon, the stars, and the sun endure, has joyfully, for the (spiritual) benefit of his own parents bestowed the land on (the Brahmin) Candrasvāmin who is of the Bharadvāja gotra, who is a Vājasaneya, and student of the six *aṅgas*, (imprecation against violators of the grant; limits of the area donated). The third (regnal) year, 5th day of Vaiśākha.

Pargiter opines that the land here was the joint property of all the villagers; in the second grant, of an individual; in the third, of a group. Yet it is admitted that extraordinary measures, going far beyond rights of such ownership, have been taken at the alienation. This land is not property in the sense of trade goods. The fact of payment is clear, as are the terms for sale and purchase in an area as important then for trade as Calcutta today; but the transaction was not for financial profit, nor an investment. In each case, the land went to a Brahmin for spiritual merit gained by the purchaser and his parents. The main question, then, is: to whom was the payment made, and for what purpose? Certainly, the *mahattaras* and common people present cannot have been the owners, for the former are the leading men of the whole district; we have, in fact, a convocation of the district *sabhā*. Pargiter takes the *pustapāla* as keeper of ownership records. This would be extraordinary, as no owner's name is given in any of the transfers. The official could only have been keeper of tax-rolls. It follows that the payment is either to the state treasury, or to those originally responsible for payment of taxes, according to custom, once clear title had been given to him. Thus the 'sixth part' mentioned would not be a sixth of the total price, but would indicate payment made to the treasury (or to those whom the state held responsible for the taxes) in commutation of the sixth portion of the yield, which was the standard land tax in this period. For further support, we may note that the rate of 4 *dīnāras* per *kulyavāpa* (as in the Damodarpur plates) is fixed in common to all three grants, but the second grant specifically mentions this as payment for waste (*khila*) land (not 'belonging to' but 'adjacent to'—*sambaddha* that of the *mahattara* Thoḍa); hence the land in the other two cases must also have ranked as uncultivated waste. Thus, the correct translation of *kṣetra* would be 'plot' or 'field', not 'cultivated land'. To develop the argument, we may consider two[6] sixteenth-century survivals. First, the payment of revenue in cash or kind depended upon the available supply of precious metals, hence upon trade; for the Delhi empire, upon the possession or independence of the coastal ports of Gujarat and Bengal. Secondly, it was possible for an immigrant cultivator in Gujarat to go to a village headman, and have a plot of uncultivated land assigned to him merely on condition of paying the taxes due to the state.

The donee is changed in *F*. 31 where Śarvanātha (AD 533) assigns to Kumārasvāmin, for the service of a temple to the goddess Piṣṭapūrikā, the two villages of Vyāghrapallikā and Kācarapallikā in the Maṇināgapeṭha, originally bestowed upon Pulindabhaṭa. Here the villages had been a royal grant in the first instance, so the situation is not comparable with the action of Dharasena; nor is anything said about small private holdings. The whole affair has a far more primitive flavour. Not only the village names and that of the *peṭha* seem aboriginal, as pointed out earlier, but the goddess Piṣṭapūrikā (? supplier of flour in abundance) is not in the standard pantheon, and Pulindabhaṭa definitely has a tribal (*P*. 52, 73) connotation too.

At the end of the period under consideration, such charters become valuable enough to forge. We possess one such forgery in the name of Samudragupta (*F*. 60; cf. also *EI* XXV, p. 51 for another); even there, the forger copied the ancient condition that villagers from tax-paying villages should not be enticed to the tax-free settlement. King Harṣa of Kanauj discovered a Brahmin holding the village Somakuṇḍa by means of a forged copper-plate (*EI*, I, p. 73, line 10; *EI*, VII, pp. 155–60), which he broke to bestow the land upon another Brahmin. However, the matter of tenure becomes less clear at this time. The *mahārāja mahāsāmanta* Samudrasena (7th cent.; *F*. 80) is seen giving away the whole village of Sūlisagrāma, as an *agrahāra* for the temple of Mihireśvara-Kapāleśvara—an odd form Sun-Śiva—to the entire body of Atharvan Brahmins resident at the *agrahāra* of Nirmand on the Sutlej. These *agrahāras* formed model villages for agriculture, as well as centres of Brahminism. Continuity is shown by the copper-plate being discovered nailed to the wall of the modern Paraśurāma temple, though no one could read the grant for centuries, and the god had changed too. This charter of Samudrasena is peculiar because of two phrases. First, the village is granted together with plain, marsh, forest, and with its inhabitants = *saprativāsi-jana-sametam*. This means that the inhabitants[7] were all Śūdras; though philological ancestors of the modern *kunabī*, could also be Brahmins, or of other high caste, who owned separate holdings and certainly could not have been given away along with the land. These Śūdras, therefore, had become quasi-feudal serfs tied to the soil, without proprietory rights of any sort; only then could the whole village be granted (though still contrary to Jaimini) people and all, to the temple[7] with its collective priesthood. The other striking phrase is in line 15 of the inscription: *rāṣṭrasametasyeyam dattiḥ paripālyā*: 'This grant, (made with the consent) of the popular assembly, is to be preserved.' The transfer needed some formal popular sanction, presumably of a noble or upper class, as the cultivators involved do not seem to have been consulted. However, the Śūdra was the essential producer; what groups imposed themselves upon him as part of the class superstructure became progressively less material to production.

The people given away by Samudrasena could not even have been arbitrary Śūdra villagers. The whole of the peninsula and the greater part of India has now just two major castes (*varṇa*): Brahmin and Śūdra. This can be understood from the historical development sketched earlier, though it has led some to deny that the traditional four-caste system ever existed. The Śūdras today are divided into countless, endogamous, local, *jāti* sub-castes whose tribal origin may clearly be proved, with remnants of tribal practice in caste *sabhās* or councils that give a measure of strength and unity to the *jāti* group. Such people cannot be given away with a piece of land, not even the Caṇḍālas. Therefore the quite rare Śūdra of Fa-Hien, Jaimini, and Samudrasena belonged to a group which had neither solidarity nor kinship support outside the village. This fits the older, *smṛti* type of Śūdra; standing apart from the three upper castes that count together as Aryan, he had no initiation rights, virtually no right to property, being himself property of the (Vedic) tribe as a whole. The

Ṛgvedic dāsa is certainly given away on occasion though the *Arthaśāstra* forbade the sale of a free Śūdra, granting him occupational rights in land. The Nirmand villagers would have been Śūdras of classical type, who could never be really free (*Ms.* 8.414), helots reduced to serfdom, with the *rāṣṭra* of the charter representing the Aryan owner-tribe; otherwise the copper plate becomes incomprehensible.

Land was regularly donated with slaves (*dāsa*) or with the settlers (*sa-kuṭumbi-jana*) to temples and to Buddhist foundations in the kingdom of Campā[8] by rulers of the fifth to the late ninth centuries. A little later, Vallabhadeva of Assam followed a similar practice (*EI*, XV, p. 185, twelfth century) even dedicating certain people with their families to the service of the temple. The land and the people transferred in Assam as well as Campā had barely emerged from tribal conditions. It is not possible here to argue, as in the case of the Punjab, back to Aryan usage with the ancient Śūdras. Some form of bondage, presumably deriving from conquest, though perhaps reinforced by tribal attachment to a certain territory, is definitely involved; all we can say is that it was rare. The tribal antecedents with consequent unity of the *jāti* are responsible for non-development in India of general serfdom, hence lack of feudalism proper in the European sense.

After all, serfdom and the manor are the basis of European feudalism, while the common military features which led Tod (*Annals of Rajasthan*; see criticism in A. Lyall, *Asiatic Studies*, I, pp. 243–50) to write of Rajput feudalism, are of tribal origin, developing from the oligarchic position of a conquering group or clan. Historical reasons explain the difference, for neither the Mauryan nor any other state in India developed villas, latifundia, or large-scale slave production as did Rome. In addition, India lacked an organized church. Pre-Muslim Rajput inscriptions show military subordinates holding a few villages (say 84) from an overlord, without serfs or manors. The Muslim attempts at direct cultivation with slave labour (e.g. Alā-ud-dīn Khilji's 50,000 *bandagān-i-khās*) also failed because of the established village economy with *jāti* divisions which made less intense exploitation profitable with far less expenditure.

More important than such local variations are the advances by specialized production. For example, settlement of the coastal strip in the face of the dense jungle and terrific rainfall became really profitable when coconut plantations were introduced. The trees were gaining hold on the Orissa coast by the time of Varāhamihira and modelled in clay for Rājyaśrī's wedding pavilion at Thanesar (*Harṣacarita*, p. 142). The north Indian climate is unsuitable for this plant of Malayan provenance. Suśruta knows it only as a comparatively rare medicinal fruit. The use of the nut in all Hindu ceremonial where it has supplanted the water-jar (*udakumbha*) is excellent proof of the effect of local usage upon ritual Brahminism, for only on the coast is it absolutely fundamental in the means of production. Other commodity plants from south-east Asia are the betel leaf (mentioned in the Mandasor weavers' *praśasti* of Vatsabhaṭṭi cited above) and areca nut, but they are luxury articles in comparison to the coconut. The coconut and by-products, particularly the oil, had to be exchanged for other necessities on the west coast, coconuts and salt remained the main exports against imports of cloth. Coconut trees grew in tremendous profusion on the coast of Thana district by AD 120 (though the fruit is not mentioned by the Periplus of the preceding century; *trans.* W.H. Schoff [New York, 1912]) when Uṣavadāta gave them away by the thousands (Nasik cave no. 10, *EI*, VIII, p. 78, *nāligeramūla-sahasra*; p. 82 *nāligerāṇi*. The *mūla* refers to the pits, the modern *āḷīṃ* of Marathi usage; the date may be AD 90). Thus trade and the middle-man-trader could never lose all their importance on the coast. The self-sufficient village unit is not suited to such production and exchange without a minimal security for private tenure or ownership of land. Hence the Goan communes held food-producing land in common, but coconut plantations on private leasehold from the commune.

Muslim trade on the international market brought a new demand for commodities which could not be satisfied by the static village community. The inevitable counterpart of the caravan merchant and maritime trader was the new armed feudal landlord who squeezed a greater surplus from the land by force, for exchange. Dues rose to 50 per cent or more of the produce, as compared to the former sixth or less. Here the rustic, parochial training of the Brahmin unfits him for action beyond the village; again we find Brahmins increasingly, though slowly, drawn into trade on the coast. Alberuni's *India* brings out, by its sharp comments, the Brahminical mentality produced by the protracted 'idiocy of village life', as against that of the Arab trader who had to face rapidly changing reality. The difference is precisely equivalent to that between the mythological geography of the Purāṇas (founded upon real travel, probably during the Jātaka-Śātavāhana interlude) and the clear useful, itineraries of the Arabs.

4. *Recapitulation*

The increase in number of villages led in particular to degeneration of the wealthy and enterprising guilds into mere castes[9] whose scattered members slowly became integrated with the particular village, the *seṭhis* turning into ordinary moneylenders. This was, on the whole, well after the Gupta empire had passed; the decay was not uniform in any case, though apparently complete long before the Mohammedan period. Production as a whole increased but it was not commodity production, whose density became very much less. The significant donations of the early part of this epoch are gifts to Brahmins already settled or invited to settle in undeveloped territory, to which they first brought—generally without themselves performing the physical labour—knowledge of agriculture, new techniques[10] and seeds, consciousness of distant markets, and a totally new social organization. They settled as a rule in small groups to which agrarian retinues were attracted. Once implanted, this productive structure was rapidly disseminated beyond the capacity of the Brahmin for development. The *dharmaśāstras* (*Baudhāyana Dh. Sūtra* 2.3.33) bear the stamp of incurable rusticity which helped the Brahmin become a good colonist. The great classical Sanskrit literature was not developed in the villages, but a court; the court itself degenerated speedily into a parastic growth upon the aggregate of villages unless it regulated irrigation and trade, matters beyond the control of a single village. So many later grants are made from royal camp-headquarters (*skandhāvāra*) that the chief activity of the central power is seen to have become movement with an armed force; this would accelerate the decay of cities as administrative centres, hence of urban culture as a vigorous force, urban production having declined with the guilds; what might have developed into a bourgeoisie withered away. The pioneer settler-priest is the ancestor of the later esurient Brahmin whose main function was to discourage innovation, originality, progress, initiative by perpetuating superstitious ignorance. The really important economic need he served at the time of first village development had vanished. The type of later gifts is foreshadowed by the prodigality of Uṣavadāta and represented by the dangerous extravagance of the Rāṣṭrakūṭa king Govinda IV of Mānyakheṭa who in AD 930 (*EI*, VII, p. 40) claims to have given away at a *tulāpuruṣa* as many as 800 villages to Brahmins, along with 3,200,000 *drammas* and 40,000 *suvarṇas*. At most, this put some accumulated money back into circulation. Rudradamān's much-advertised mastery of Sanskrit and Harṣa's proven command of the medium show how rulers of foreign descent were assimilating themselves creatively to the priesthood and aristocracy of their times; the village Brahmin's Sanskrit remains sterile parroting of ancient formulae, whose origin and meaning was progressively forgotten. There is no Georgic verse, nor an Indian Hesiod. We have necessarily a different mentality and cultural pattern from that which produced, by the cooperation of many donors to a great design, the monuments of

Sāñcī, Kārle, Amarāvatī, Kaṇherī. Cooperation within the restricted horizon of a village had to be different in scope and vision, or the lack of it, than joint action by people who gained knowledge and cash profit by commodity production and trade over long distances. The change is marked archaeologically by the disappearance of finer silver coinage in favor of coarser or cruder issues, and the vanishing of the fine polished black ware (for export) which was replaced in the main Gangetic basin by local pottery with simpler production techniques that survive to this day. Both of these indicate lower density of trade and commodity production, simultaneously with the rise of self-sufficing villages over the greater part of the country. The process was completed between the second century AD and the early Gupta period. The system was ripe for collapse, or for the historical alternative of Muslim conquest with feudalism from below and heavier forced expropriation of a surplus which was traded: the creation of a commodity market through force, without reliance upon Brahmin support.

Even after a region had been settled by agrarian villages, it was well worth the king's while to seed it with a few Brahmins. Apart from the religious merit thus gained by the royal donor and his parents, the grateful Brahmin colonist, as a sharer in the local revenue, was of considerable help to the state; the superstition he preached and helped the villagers practise replaced violent coercion. There were two concomitants. First, protest against exploitation took on a succession of theological disguises, like the originally revolutionary movement of Bāsava, the first Liṅgāyata, or the *smārta-vaiṣṇava* controversy. Second, it made the kingdom more helpless against invasion. As long as the invader, even Greek, Scythian, Hun, or aborigine, was himself a brahminizer (e.g. the Hūṇa Mihiragula's *agrahāras* to imported Brahmins, *Rāj*. 1.306–11; *ITM*, p. 191), all reverted in time to the previous state. This cycle was broken by the Islamic conquest, as it would have been without the Muslims, once a saturation level had been reached. The proof is again from Kaśmīr, where the *vaiṣṇava* king Jayāpīḍa (AD 751–82) plundered Brahmins ruthlessly and systematically; Śaṃkaravarman (AD 883–902) robbed temples. The spoliation of temples and melting down of metal images was methodically carried out by Harṣa (1089–1101) of Kaśmīr under a special Hindu minister *devotpāṭananāyaka*, as a matter of fiscal policy with no theological excuse whatever. The Muslim conquest took place only in AD 1340, without a blow; conversion of the majority to Islam had taken place silently much earlier, also without a struggle. The Muslim kings were, with one exception, benevolent towards the temples and the

Brahmins, while the administrative language continued to be a Sanskrit jargon mixed with Perso-Arabic technical terms. The real struggle had been fought out bitterly centuries earlier (*Rāj.* II, pp. 305 ff.), between local chiefs and the central power, ending the victory of feudalism though not of the Ḍāmaras. That the major consequent change was increased trade is seen from the well known, enormous rise in the price of Kaśmīr grain to conformity with prices elsewhere in the Delhi empire.

The Mauryan conquest of large tribal areas led first to the sprouting of a few centres of vigorous trade, and then of small kingdoms. The Guptas reduced these principalities to set up a new type of empire which promoted village settlements by private enterprise. The increase in number of villages first led to feudalism from above. In these stages, the Brahmin caste plays an important but shifting role. The end is marked, both in theology and politics, by the onset of feudalism from below, which is the principal feature of the Muslim period, though the appearance of the village did not change greatly with the new method of extracting a greater surplus.

NOTES

1. This dam, now lost without trace, was begun under Candragupta Maurya, finished by Aśoka's Persian satrap Tuṣāspha, rebuilt in greater size by Rudradāman, and again extensively repaired by Cakrapālita, son of Skandagupta's administrator Parṇadatta, in AD 456. Thus, a shrunken kingdom meant that regulation of water supply and conservation of the water—one of the few essential functions of a central power in India—deteriorated. The other lost function, beyond the jurisdiction of a single village, would be the regulation of trade and its encouragement; but here we have less the effect than the cause of decay for the kingdoms. The semi-isolated valley of Kaśmīr enables us to study the general development quite clearly; the history there differs only as regards time-scale. The conquests of Lalitāditya-Muktāpīḍa (AD 733–69?) derived ultimately from water-conservation and irrigation projects in Kaśmīr; the same kingdom again showed prosperity and expansion as soon as Suyya completed new water-works under Avantivarman (AD 855–83). The expense of maintaining a great central army and bureaucracy afterwards led to heavy taxes, internal discontent, local uprisings, and the development of feudal barons. Let it be suggested that the greatness of Bhoja Paramāra of Dhārā is shown less by his tremendous erudition, patronage of Sanskrit poetry, and additions to our culture, than by the great reservoir at Bhopal, a unique piece of engineering later blown up by Hoshang Shah.
2. *Gupta* includes the allied Vākāṭakas, for whose power and independence a case can be made out as by S.K. Aiyangar, *Ancient India* (Poona, 1941), vol. I, pp. 91–166. They, rather than the Guptas, seem to have held most of the Śātavāhana

Deccan till the rise of the Cālukyas, but the main point is that we hear little of the wealth, power and democratic generosity of the coastal trade centers at this time, though the caves of Elephanta prove that the capacity was present. The overinflated work of K. P. Jayaswal: *History of India, AD 150– AD 350* can hardly be recommended.

3. The Nagardhan grant (*EI*, XXVIII, pp. 1–11) is made at the request of a local elephant-trainers' guild, sealed with the guild seal; but the piece of land is granted actually by king Svāmīrāja (19 March, AD 573), who adds a whole village on his own account. Thus, land was not property in the modern sense, ownership vested in the collective residents, in the sense of exploitation and occupation; but transfer could only be effected by the state, here the king, that had taken over tribal rights to territory, and hence to granting of tenancy.
4. If in this inscription and others of the king, the word *-pratyaya* is translated as 'adjoining (the holding of the person named earlier in the compound)', all the inscriptions make better sense. The king does not transfer holdings belonging to someone but bestows waste-land bounded by such individual holdings, explicitly named.
5. For the common and private holdings under the old system, see my note on 'The village community in the Old Conquests of Goa', *J. Bombay Univ.*, vol. XV, pt. 4, 1947, pp. 63–78. For that climate, extra land was often a liability, because of the torrential rain and rank jungle; but the main food-producing land was held in common, and the community retained the right of periodical reassignment of any private holding, according to changed needs and capacities of the families. There was in addition a peculiar method of sharing the surplus, after all village public works had been paid for. The artisans had a share of the surplus, or a charge upon the general yield of food-grain, besides any plot assigned for development by their own labour. Such artisans come under the *nāru-kāru* and *baḷutedār-aḷutedār* of Maharastra village, whose nature and functions are clearly described under the given words in Molesworth's Marathi-English dictionary; these include the *gurava* who need not be a Brahmin but serves or tends to the village cult, clear remnant of tribal belief. F. Kielhorn, discussing the Dibbida agrahāra plates of a Matsya king dated Apr. 6, AD 1269 seems to me to misinterpret lines 65–7 of the inscription (*EI*, V, p. 112), where the *grāmakārukāḥ* are named as carpenter, goldsmith, barber, blacksmith, potter, and sesamum-grinder; these have their holdings exempted from the gift, just as was that of the *amātya* Peddana, whereas the editor takes the charter as directing them to pay their dues hereafter to the donees. *EI*, V, p. 96 gives a different set of *agrahāra* functionaries; in addition, we seem to have feudal landlords developing under Vīracoḍadeva: *rāṣṭrakūṭas*, as the leading *kaṭumbins*, not the royal dynasty. The *kāru* occur in Gupta period inscriptions, being warned in each copper-plate charter of the new title. The *kuṭuṃbiṇ* of the inscription could also be a Brahmin, and this is supported by the modern label *kutumbana* applied to small food-producing plots, away from the actual house-garden plot, that might be assigned to a Brahmin. Some writers now deny that common holdings ever existed, and some prefer to see the *ryotwārī* system as the general form of Indian landholding

right up to Vedic time; these may be ignored after the evidence cited. The duties, privileges, ultimate decay into parasitism of the Baḷutedārs and Aḷutedārs are described for Maharastra by T.N. Atre in his book *Gāṃva-gāḍā* (Poona & Karjat, 1915). In giving a good picture of the old village organization in its declining years, with shopkeeper and moneylender becoming powerful, where every group shook off its duties without failing to claim its fullest rights, the petty-bourgeois Brahmin landholder author fails to mention the deadliest encroachment of all: that of his own class supported by the British.

6. W.H. Moreland, *The Agrarian System of Moslem India* (Cambridge, 1929), pp. 68, 129.
7. Fleet takes the fields named as belonging to certain *kuṭumbins* to be part of the gift, which would make these people serfs. This is most unlikely, for only the *Śūdra* colonus in these cases had no property rights, as against the Ārya (member of the three upper castes).

   The correct interpretation is that the fields whose owners are named set the boundaries to the gift, but were not included therein; the word *paryantām* and the general usage of such charters prove this. The Punjab having been settled even before the Mauryans, it is difficult to interpret the rest of the village as pastoral—particularly in the absence of any evidence in the grant—hence one must admit, in such cases at least, the development of serfs attached to the land, by AD 700.
8. Fa-hien (Legge 43; Giles 21) reports that the *vihāras* of his day possessed ancient copper-plate charters of endowment 'with fields, houses, gardens and orchards, *along with the resident population and their cattle*'. The words I emphasize are rendered by Giles 'with men and bullocks for cultivation'. The same traveller reports cultivators as being free to move away so the precise nature of the grant is not clear. At any rate the cultivators in general were not serfs in AD 400, nor at the time of Hiuen Tsang, say to AD 644, *JBORS* II.407, 415, 423 gives inscriptions found in and probably originating in Dhenkanal, of which that of Śubhaṃkaradeva is the earliest, and which transfer tenants—including craftsmen—with the land; but this seems merely gift of dues owed to the king by these workers, not servitude of any sort.
9. The inscriptions have been collected and translated in R.C. Majumdar's *Ancient Indian Colonies in the Far East*, vol. I, *Champa*, part III, particularly pp. 6, 7, 69, 82, 90.
10. J. Jolly, *ZDMG*, L (1896), 507–18 and H. Oldenberg, ibid. LI (1897), 267–90 criticize E. Senart's book *Les Castes dans l'Inde* (then new; 2nd ed. Paris, 1927) for taking the four Vedic *varṇa* classes as equivalent to the *jāti* castes, developed by intermixture according to Brahmin *śāstra* writings; also for neglecting the role of the guilds, so prominent in the Buddhist works analyzed by R. Fick in *Die sociale Gliederung im nordöstlichen Indien zu Buddhas Zeit* (Kiel, 1897). All of these neglect changing productive relations, the influence of tribal contact and endogamy, formation of guilds from tribal fractions and castes from both. Buddhist texts were re-edited far from Magadha, in a trading environment, at a later date than that even of Aśoka, some being translated from Māgadhī with new additions after Puṣyamitra (J. Przyluski, *Légende de l'Empereur Aśoka*, chap. IV). Lack of rigidity in occupational as well as caste rules are concomitants of

a commodity-producing society, where the stagnant village was not the norm, and change of occupation would be profitable. If, as in the Pāli texts, whole villages were constituted at times solely of members of a single occupational *jāti*, it means that the inhabitants were fabricating wares for exchange, were producing commodities. The Indian village as it finally emerged had to entice a few indispensable craftsmen by allotting special plots, and shares in the produce.

11. This refers not only to the replacement of digging-stick, hoe, or slash-and-burn tribal cultivation by the plough, but also to the calendar. Plough agriculture as the mainstay of food production cannot be successful in India without foreknowledge of the monsoon. It is necessary that the land receive its first ploughing and harrowing before the monsoon sets in, final preparation and sowing in time for the seeds to sprout well before the monsoon slackens, weeding during the slack period before the north-east monsoon breaks; and harvesting without loss can only be after the monsoon has ended. All these are essential for the main crop, whatever might be done by irrigation which was generally beyond the scope and means of a single village. The lunar calendar with its zodiac divided into 27 *nakṣatras* enabled the predictions to be made after correlation with long empirical observations; some knowledge of mathematics is involved here, for the predictions have to be made even when the stars are not visible. Naturally, the heavenly bodies were taken as themselves the cause of the weather, which led to complicated systems of propitiation which would influence them, and through them the climate. The inevitable development of crippling superstition is therefore the consequence of a great initial success which materially helped food production. This also explains the slightly different calendars used in the greater meteorological divisions of India, where the monsoon behaves differently. Tribesmen learned all they needed for food-gathering from direct observation of plants, birds, animals, which may have left some mark upon the art of divination by omens. The superstitions can be most effectively ended by successful forecasts and extensive broadcasts of the weather at long range in time.

19

The Autochthonous Element in the *Mahābhārata**

1. *The Problem*

In his classic study of the great Indian epic, E.W. Hopkins summarized his general conclusions[1] as follows: 'Bharata (Kuru) lays, perhaps combined into one, but with no evidence of an epic before 400 BC. A *Mahābhārata* tale with Pāṇdu heroes, lays and legends combined by the Puranic diaskeuasts, Kṛṣṇa as a demigod (no evidence of didactic form or of Kṛṣṇa's divine supremacy), 400–200 BC. Remaking of the epic with Kṛṣṇa as all-god, intrusion of masses of didactic matter, addition of Puranic material old and new; multiplication of exploits, 200 BC to AD 100–200. The last books added with the introduction to the first book, the swollen Anuśāsana separated from Śānti and recognized as a separate book, AD 200 to 400; and finally AD 400 +: occasional amplifications . . .'

No material exception can be taken to this if one restricts the inquiry to the lines followed by Hopkins; but then, it becomes impossible to motivate the remarkable transformations of the vast collection as a whole. In this note, supplementary considerations are proposed so that the scope of investigation may be enlarged and some further insight gained into the mechanism of inflation by analysis of the underlying social changes. The need to hold the interest of successively changing audiences composed of elements decidedly more heterogenous than, say, in the Athens of Peisistratus, accounts for the gaping seams of the

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The *Mahābhārata* (*Mbh.*) text cited is of the Poona critical edition initiated by V.S. Sukthankar at the Bhandarkar O.R. Institute, and still incomplete; reference by number of *parvan, adhyāya, śloka*, without the siglum. For the background material, I have used two books of my own; a) *An Introduction to the Study of Indian History*, Bombay, 1956; b) *Myth & Reality*, Bombay, 1962.

extraordinary patchwork. The discussion here calls special attention to one hitherto neglected factor.

The *Mbh.* is usually regarded as the story of a great battle, with the addition of innumerable narratives that are not relevant to the main action. Hopkins failed to attach any importance to the frame-story that unaccountably makes the *Mbh.* as it now stands into the report of a great *yajña* fire-sacrifice, not of the battle. Janamejaya III performed this sacrifice to encompass the destruction of the *nāgas*, long after the fighting was over. These Nāgas are demonic beings who appear simultaneously in the guise of poisonous cobras and also in human form. One of them, Takṣaka, had caused the death of king Parīkṣit II, Janamejaya's father. The Bharatan stories, whether of war or peace, enter as in the normal Yajurveda-Brāhmaṇa tradition of revolving narrative (not necessarily a cycle) during all *sattra* sacrifices of long duration. The result of the frame-story in this particular case, however, was quite anomalous; the patron king Janamejaya was diverted from the very purpose and main object of the sacrifice, complete destruction of the Nāgas. Even the prime offender Takṣaka managed to escape. The 'snakes' were saved (1.53.7; 18.5.27) by the young visiting priest Āstīka, himself the son of a Brahmin ascetic Jaratkāru by a Nāga girl also named Jaratkāru. The father belonged to the Yāyāvara-kula, which was rescued from extinction by this peculiar marriage—doubly banned by the *smṛtis* inasmuch as it means both apostacy and miscegenation; how the son Āstīka could be regarded and initiated as a Brahmin is a mystery. (The famous poet Rājaśekhara claimed descent as late as the ninth century AD from a Yāyāvara line; he married a lady from the feudal Rajput or Marāṭhā Cāhamāna family, certainly not Brahmins). As for the irregular union, the Central Indian medieval dynasty Nṛpati-parivrājaka-kula was similarly founded by a Brahmin 'ascetic' Suśarman (Fleet as in note 14; p. 115, line 5 of the inscription of Saṃkṣobha; also inscriptions nos. 22, 23 of Hastin) who forsook both his vow of celibacy and his caste among the aborigines. King Lokanātha of Bengal boasted of his descent from a Brahmin father and an aboriginal gotra-devī (*EI*, 15.206–7). We might note in passing that Jaratkāru's marriage was matrilocal; Āstīka was brought up by his Nāga maternal uncle Vāsuki.

Hopkins chose to ignore this particular feature of the *Mbh.* Whereas Sheherazade's tales over the Thousand and One Nights fit logically into their frame story, the *Mahābhārata* proper is turned into a rather irrelevant by-product by the story of Āstīka's successful intervention. If the subparvan named *āstīka* is to be included in what Hopkins called 'the introduction to the first book' and lumped together with the 'last books' as a final addition between AD 200–400, his suggested development of the *Mbh.* diaskeuasis would lack cogency and plausibility. If Kṛṣṇa as all-god is placed at an earlier stage, why is he neglected so completely in the final book? There, the heroes attain the Vedic heaven of Yama and Indra; Kṛṣṇa-Govinda appears only as a palpable interpolation in the northern version, a single doubtful line (18.4.2^{ab} with wavy line) which any editor who had grasped V.S. Sukthankar's clear logic would have deleted. After the *Bhagavad-gītā* (which Hopkins surely did not include among the 'occasional amplifications') the principals should have been sent to their ultimate refuge in Kṛṣṇa's all-embracing divine essence. Instead, we find only that the 16,000 women of the dark god's teeming harem eventually sank into the Sarasvatī river, turned back into apsarasas and went to Vāsudeva (18.5.21); no one else reached the all-god of the *Gītā*. It is not clear just where Kṛṣṇa himself had gone; his elder brother Balarāma reverted to the great Nāga who bears this earth upon his head to keep it from submergence into the waters (16.5.12–15; 18.5.20).

How could the Nāgas—demonic enough to be destroyed by a fire-sacrifice—have at the same time this extraordinary importance, to the extent that the all-god's elder brother was the incarnation (1.61.91) of the greatest 'cobra'? The answer necessarily depends upon our explicit or implicit basic hypotheses. Was the whole story pure invention, or did the narrative have some historical basis which has now passed into legend and myth? I propose to show that the historical basis of the narrative is infinitesimal, though the diaskeuasis does have considerable historic significance.

2. *The 'Historical' Interpretation*

To reach an unmabiguous conclusion, there must be some criterion of validity. This can only be agreement with such material evidence as may be derived from archaeology, history, ethnography and sociology, in so far as available sources permit. Against the hypothesis of 'pure invention', one must ask why the invention took these particular forms. Bhīma, poisoned by his Kaurava cousins and thrown into the river bound hand and foot as he lay unconscious, was saved by the Nāgas who sent him back to his mother, stronger than before (1.119, an interpolation). Psychoanalysts, for example, could do a great deal with Arjuna's death in battle at the hands of his own son Babhruvāhana (14.78). But the episode ends in the dead hero's being brought back to life by the mysterious jewel which the great cobra is supposed to carry in his forehead. This jewel had to be specially brought from the Nāga underworld by Ulūpī, a princess of the Kauravya Nāga line with whom Arjuna had briefly consorted in the Ganges (1.206). That the episode had general currency is clear from the rival *Mbh.* version of Jaimini whereof the 14th book still survives. The last army leader of the Kurus, Aśvatthāman, bore such a jewel (at once a prophylactic charm and a symbol of sovereignty) in his head from his very birth (10.11.20; 10.15.27 ff.; 10.16.19 ff.). That this relatively minor character of the *Mbh.* is the king Spatembas[2] with whom, according to Megasthenes, Indian (Magadhan) kings began their long dynastic list is philologically obvious. A rather corrupt copper-plate charter of the Pallava king Skandhaśiṣya (*sic*) claims descent for the founder of his line from Aśvatthāman, son of Droṇa of the Bharadvāja clan, and a 'snake woman' (*EI*, 5.1898–9. 49–53). Less obvious is the further connection with Nāgas in general through the capital Ahicchatrā ('snake-canopy') of Northern Pañcāla which the Pāṇḍavas wrested from Drupada to bestow upon their preceptor Droṇa, father of Aśvatthāman. Why should Aśvatthāman of all people count as one of the seven immortals (*cirañjīvin*) along with Bali and Hanumān (of whom the latter is still and the former obviously had been an important cult figure)? The interweaving of *nāga*-myth into the *Mbh.* was essential to the fabric and the pattern, not merely the result of some mental quirk of the bards.

The historical interpretation attempted by Pargiter[3] takes the Puranic lists of dynasties as genuine and valid but for textual aberrations due to copyists. This led him to place the *Mahābhārata* war as a real event of about 950 BC. The origin of the 'Ailas or Aryans' would then seem to be at Allahabad (*AIHT* chap. xxiv & p. 296), whence they spread out in all directions. The '92 steps (generations) from Purūravas to the Bhārata battle' places the first 'Aryan' king Purūravas at 2050 BC (*AIHT*, p. 301). The Nāgas (taken as a primitive tribe or people) 'established themselves at Takṣaśilā and assailed Hastināpura—which indicates that the Punjab kingdoms that played so prominent a part in the battle had fallen, and certainly little more is heard of them. The Nāgas killed Parīkṣit II, but his son Janamejaya III defeated them and peace was made. Still they held the north-west, the principalities on the Sarasvatī and at Indraprastha disappeared, and Hastināpura remained the outpost of the Hindu kingdoms of North India' (*AIHT*, p. 285). Pargiter's synchronous tables put Rāma Jāmadagnya (Paraśurāma) at about 1670 BC. 'After Rāma's time, the Haihayas recovered their power and extended their conquests into North

India, making continual raids, overthrowing kingdoms, founding none, and devastating countries, which were then overthrown by tribes from the northwest also . . . The carnage and ruin must have continued for nearly a century, and the deplorable condition to which North India was reduced may be imagined by that caused by the Marāṭhās and the Persian and Afghan invasions in the eighteenth century (AD), for the Haihayas occupied the same region as the Marāṭhās and the two periods are strictly comparable and remarkably alike' (*AIHT* 270–1).

Nothing could be more explicit or more inaccurate than this imagined reconstruction: Before the imperial Pax Britannica, Indian history as Pargiter saw it had no real change of structure; dynasties succeeded one another, raids and carnage were the norm, with an occasional great war at Panipat. But what did Pargiter understand by 'Hindu' kingdom? What could 'Hinduism' mean some centuries before the Vedas? What form did the kingdoms take? His fanciful 'history' is easy to demolish. Alexander and his successors found no Nāgas at Taxila or anywhere else; nor is there any Greek mention of Hastināpura and the Kurus. On the contrary, the great Indian kingdom of the Punjab in the fourth century BC, was expanding under a Pūru aristocracy and chieftain (king Poros). Moreover, continuity is shown by the oldest Veda which places the Pūrus in the Punjab, fighting against king Sudās over a diversion of river waters. The Vedic Pūrus are generally created as an Aryan tribe with good Brahmin priests.[4] The name Kuru is represented only by king Kuruśravaṇa, 'fame of the Kurus' in *RV.* 10.32.9 but by nothing else in the oldest Veda. This fits in very well with *Mbh.* genealogies which make the Kurus a branch of the Pūrus. At the time of the Buddha, there existed a tiny Kuru land with its petty king or chief, somewhere in the Delhi-Meerut region. In Buddhist tradition,[5] the Kurus had the lineage of Yudhiṭṭhila (*F.* 4.361; 5.59 ff.), and names like Pāṇḍava-pabbata also occur. Nothing appears of the great epic magnification of Kuru power, no mention of a former Kuru empire, or of a tremendous Bhāratan war, all of which must derive from the imagination of Kuru or later bards, not from history. There is not the remotest equivalence in scale between the war—if any—and the colossal epic which describes it.

There still remains the question of the lost but strongly divergent lists of kings and dynasties; e.g., the one known to the Greeks as headed by Spatembas-Aśvatthāman. The extant Purāṇas do not preserve all records, only the small fraction that happened to suit the various sectarian purposes of a narrow line of priestly scribes. The resultant genealogies and king-lists were recognised even by devout and credulous Hindus of the twelfth century AD, as palpable forgeries.[6]

3. *The Social Milieu*

There seems to be no objection at first sight to the hypothesis of dynasties ruling various countries or peoples in India about 1600 BC, in much the same way as in AD 1600, with superficial changes in names, speech and dress. After all, the Indus valley culture shows highly developed urban settlement early in the third millennium BC, of which nothing was known at the time Pargiter wrote but which could support his underlying assumption of a fully developed and settled Indian countryside from 2100 BC, or even earlier. This facile reasoning ignores the essential difference between the two fertile alluvial basins of the Indus and the Ganges. Rainfall is low in Sind and the lower Punjab. There was no need to clear extensive or dense forests, nor was food-gathering away from the river a strong possibility. This meant earlier development of agricultural food production on flood-irrigated land. The Gangetic plain, on the other hand, has a decidedly heavier rainfall. The oldest settlements had to be near the foothills, because clearing the land by fire was not difficult there; it was not at all easy where the alluvial soil (with its forest cover) lay deep. (This important difference also explains why extensive conquests and wars between cities or tribes, as in pre-conquistador Mexico or South America were not likely in the Gangetic region in the third millennium BC. The Incas and the Aztecs faced a situation where the cities were centres of expanding rings of cleared land which rapidly lost its fertility. The cultivation of beans and maize by digging-stick culture was feasible only where the forest was tractable; not on the Amazon or the Orinoco). Aryan land-clearing by fire for regular agricultural settlement, as distinguished from shifting slash-and-burn cultivation, was conceived as a sacrifice to Agni. The progress of such clearing from the Sarasvatī eastwards to Videha (south of Nepal) and beyond is clearly described in a famous passage of the *Śatapatha Brāhmaṇa* (*ŚB.* 1.4.1.14–16). The one exceptional region which lies at some distance from the northern hills but could still have been usefully cleared by fire is precisely Kuru-land, the low watershed between the Punjab and the Gangetic basin. Delhi Ridge and Panipat were of considerable strategic importance in later times, which would make the spurious magnification of the Bhāratan war quite plausible. But the importance of this territory at the dawn of history must lie in its early transition from food-gathering to plough agriculture. Finally, the present fertile riparian tract of the Ganges has very little stone for tools, let alone metal. The best land there could not have been cleared without an ample supply of cheap metal, namely iron. The heavy rainfall and excellent soil guaranteed a dense forest cover in prehistory. Primeval forest (*mahāvana*) covered the greater part of the region in the sixth century BC. The Buddha could spread his doctrine only along a few trade-routes. The Arthaśāstra takes the norm of settlement in the fourth century BC, as in scattered *janapada* units separated by extensive tracts of forest and wasteland; whereof the latter was to be settled under state control, but the former left to the *āṭavika* forest savages till they could be corrupted and tamed. Land-clearing on a large scale by fire was ended by Aśoka's fifth pillar edict. That this was not a Buddhist vagary is seen from *Mbh.* 12.35.7, 12.35.30, etc., where dying Bhīṣma also forbids the practice as a sin, except when necessary to save cattle.

Iron was a closely guarded monopoly outside India till nearly the end of the second millennium BC. There is no likelihood that it developed earlier in India. The Indus basin has no sources of iron, while food-gathering was rather easy in the eastern river-valley. This ease of food-gathering not only means less urgent need for plough culture but also underlies the *vānaprastha* retreat and the rise of mendicant sects in sixth-century Magadha. Even in Maharastra, where the average soil is less fertile, over 40 varieties of staples (not counting edible fruit, nuts, tubers, vegetables, mushrooms, etc.) are recognised as *dhānya* and *upadhānya*. Though most of these are now cultivated, all but three or four can be found wild under suitable conditions. Moreover, it is possible to show[7] that Maharastra did not have extensive plough-using villages before the sixth century BC, hence no kingship in the sense required by the Bhāratan war, nor cavalry, nor the possibility of Marāṭhā-Haihaya raids. The intervening terrain is unsuitable for long-distance campaigns in chariots without iron tyres (the earlier covering for wheelrims was rawhide); the horse was not ridden till the end of the second millennium BC. It is most improbable that iron was sufficiently plentiful anywhere in India for the existence of local kingdoms which could supply large contingents for a war at Kurukṣetra in 950 BC.

W. Ruben, in a useful study of Kṛṣṇa legends,[8] reached the conclusion that the demigod was of non-Aryan origin (because of his black skin-colour and conflict with Indra). Removal of the mythical element by comparison with foreign legends and myths leaves a residue which seemed to Ruben evidence of a real conflict between Mathurā and Rajgir, capital of the Magadhan king Jarāsaṃdha. This conclusion seems unlikely to me. The two places are over 500 miles apart as the crow flies, while the trade-route was much longer. Military operations over such a distance before the fifth century BC, are hardly plausible; but by then, the Ganges had become the main transport artery and Patna the capital of the Śiśunāga dynasty. Rajgir owed its situation, as Magadha owed its later imperial glory, to the proximity and control of sources of iron and copper. Mathurā could not have had a good supply of either metal before Magadha gained a virtual monopoly of both by the sixth century BC. On the other hand, Mirzapur cave paintings depict charioteers fighting with aborigines who do not have horses; one hero in a two-horse chariot is about to hurl the missile discus, Kṛṣṇa's special weapon. The pictures may be placed early in the first millennium BC, so that the fight is either between immigrant Rajgir settlers and the horseless autochthones or between raiding 'Aryans' from a distance—presumably in search of iron ore—and the aborigines.

The extant *Mbh.* shows tremendous Bhārgava[9] influence. Magadhan tradition including the Buddhist was, in contrast, overwhelmingly dominated by the Kaśyapa Brahmins. This is seen from the position of Asita or Kāla Devala (a leading Kaśyapa) in the *Mbh.* and in Pāli sources which place that sage's death just after the birth of the Buddha. The outstanding figure in the Buddhist Order at the time of the Teacher's death was Mahā-Kassapa; various Kassapas were the leading contemporary Magadhan gymnosophists. The list of 'former Buddhas' also contains several Kassapas. The Jain, Mahāvīra was made into a Kassapa by 'exchange of embryos', in spite of his impeccable Licchavi kṣatriya birth. The Bhṛgus as such have no special honour in the oldest Veda (though the second book of the Ṛgveda is ascribed to the Gṛtsamadas, of the Jamadagni clan, eventually Bhārgavas); the Kaśyapas have even less, merely the supposed authorship of many individual hymns, particularly in the ninth (*soma*) book with just one solitary reference to the name in *RV.* 9.114.2. These newcomers could not have been the founders of Aryan tradition in the U.P. *à la* Pargiter, for both in Pāli accounts and the Upaniṣads[10] we find eastern Brahmins going to Taxila (which could, therefore, not have been occupied by Nāgas) or even further west to learn their business, the Aryan-Vedic *yajña* fire-sacrifice ritual. The highly composite *Mahābhārata* which we possess today shows that the two Brahmin groups had come to terms with each other and with the aborigines too, inasmuch as Kaśyapa is promoted in the *Mbh.* to the high position of fathering all creation—including the Nāgas—as a *prajāpati*. The half-Nāga Āstīka who saved the Nāgas from Janamejaya's vengeance had an eminent

Bhṛgu preceptor (1.44.18). I suggest that this compromise between the different traditions was a late but essential contrivance.

The accord must have been post-Buddhistic in any case. The earlier Brahmins could afford to be and indeed had to be parochial in order to retain any importance in a society composed of pastoral tribes in perpetual conflict; victory in Aryan tribal warfare meant, as a preliminary, the *yajña* sacrifice, generally a Brahmin monopoly which is flatly condemned nevertheless in 14.92–6. The repeated emphasis upon non-killing (*ahiṃsā*), so incongruous in a war-story of slaughter to extermination, can hardly have been popular before Aśoka. The two Yavana cities Antākhī and Romā of 2.28.49 are to be identified with Antioch and Rome. These cities can hardly have reached any importance for Indians except by trade, and that not before the first or second century AD, Sahadeva did not approach them but received tribute from them by sending heralds, apparently from Bharukaccha, (Barygaza of the Greeks and the modern Broach) which was in fact the great emporium of that period. The direct trade with Rome and the Mediterranean was terminated in the third century AD, by the rise of the Sassanians, the defeat of the Roman emperor Valerian by Sapor and the 'Thirty Tyrants' chaos.

Some of the peculiar features of the epic are thus due to the differences between old tradition and later reality. For example, Kṛṣṇa's Dvārakā is now located by Hindu tradition in Kathiawad, on the sea. This is south of Mathurā, which is taken to prove the formation of that particular southern trade-route in antiquity according to Ruben's analysis. But the *Mbh.* is absolutely clear (2.13.24 and again 2.13.49) that Dvārakā was settled by refugees who fled westwards from Mathurā in fear of Jarāsaṃdha, not to the south. The original Dvārakā could not have been on the sea. The relevant trade-route was the northern land-route through Afghanistan to Persia and Palestine. The women of the Yādavas (after the men had killed each other off) were abducted by the Ābhīras from the convoy of Arjuna. The Ābhīra tribes were placed on the lower Indus by the geographer Ptolemy.[11] This means that, even in the second century AD, they would have found the interception of caravans from the modern Dvārakā to Delhi rather difficult. But 2.29.9 puts them higher upstream, on the Sarasvatī, which had dried up by the time of the Brāhmaṇas. This location would increase the likelihood that the original Dvārakā lay to the west and not to the south of Kuru-land. The Ābhīras are not a Vedic tribe, nor do they occur in the Brāhmaṇas. Ptolemy's geography, though distorted for the peninsula, seems fairly reliable for the north; his report[12] of the Brakhmanoi Magoi under mount Bettigo agrees surprisingly well with the *Sāmba Purāṇa*, which places Maga Brahmin sun-worshippers on the Candrabhāgā river—presumably a migration during the early Kuṣāṇa period.

4. *Structure of the Synthesis*

The *Mbh.* redaction thus enlarged trifling local incidents into world-shaking events. Petty though perhaps desperate tribal conflicts appeared as a struggle for universal empire. Originally unrelated and even contradictory reports were combined into one document without troubling to remove logical inconsistencies. This should indicate a mass of recitative material already formed which had to be respected, while society as well as tribes and dynasties had changed so much that the precise historical content no longer mattered to anyone. Clearly, the *Mbh.* 'war'—as distinct from some stages of the redaction—cannot represent 'Aryan' or 'Hindu' expansion, a supposedly universal 'epic period' between the 'Vedic' and the 'Buddhist' periods which appear in our textbooks. The Ṛgveda is concerned primarily with the Punjab; the Buddhist period means the political and military expansion of Magadha (which did not exist in the earlier Vedic period) over the whole of India, if these two periods have any meaning at all. If the great epic dealt with negligible tribal principalities like the Kuru offshoot of the Pūru tribe, its supposed events deserve no 'period' of their own, even if a single age could be ascribed to them all. The prime historical and social context of the document can only be change (in a comparatively restricted locality between the Punjab and the Ganges) from food-gathering to food-production; the redaction of the epic merely reflects the change. This adaptation of myths and cults (into amphictyonys worshipping common gods) eventually became a normal process for peaceful assimilation of food-gathering tribal aborigines into a wider, plough-using agricultural synoikism with caste and class division. Many later groups naturally wanted a respectable ancestry which the unwieldy epic could provide by inclusion of a suitable *upākhyāna* or by adding the proper chieftain to one of the contending armies; here we are concerned only with the major trends.

The Kṛṣṇa legend may be used again to show this feature of the epic. The killing of Jarāsaṃdha was a treacherous affair, like most of Kṛṣṇa's advice during the great battle[13] in which he did no active fighting. The local knowledge shown of Rajgir is accurate, or at least tallies well with Buddhist records. But the senseless desceration of the holy antique *caitya* at Rajgir (presumably the Pāsāṇaka Cetiya where the Buddha rested so often) by Bhīma and Kṛṣṇa seems wanton sacrilege (2.19.19), unsupported by any other record. Why the Jarāsaṃdha episode appears at all is not clear; unless it reflects in some way one of the few original exploits of any daring reported in lays of the Mathurā collection. The main Kṛṣṇa feat in the *Mbh.* is the killing of Śiśupāla, king of Cedi. A Cedi tribe receives a special blessing in one *ṛk* of the Ṛgveda (*RV.* 8.5.39), but its territory must have been close to the Śibi and Madra country (near Sialkot or Shorkot) according to the Vessantara Jātaka. In any case, the kingdom had become extinct before the Buddha. The Cedis of the *Mbh.* are to the east of Delhi, and south-east of Fyzabad, on the way to Rajgir, presumably the ephemeral and puny Ceti or Cecca of Pāli books, somewhere near Nepal. The reproaches (2.38.13 ff.) that Śiśupāla levels against Kṛṣṇa in Yudhiṣṭhira's assembly are insulting but not wholly undeserved. Kṛṣṇa's killing him, the senior guest, before the assembled kings would have polluted the investiture ceremony and called for immediate reprisals. That the whole story was foreign to the nucleus furnished by Kuru-Pāṇḍu bards and ollaves is quite obvious. For, Śiśupāla's personal name is given as Sunītha. After his supposed decapitation by Kṛṣṇa, 'Sunītha, king of Cedi' nevertheless attaches the standard to Yudhiṣṭhira's triumphal chariot (2.49.6). In 2.11.32, Śiśupāla's son had been crowned on the spot by Arjuna, who had no right to nominate the successor; moreover, by Indian custom, the son (whose name is not given) would not bear the father's personal name. The discrepancy is noted only by three southern MSS which try to smooth it over, changing Sunītha in 2.49 to 'son of Sunītha'. The conflict between a Kṛṣṇa and some Cedi king was important to the demigod's saga, but irrelevant and absent from the primary *Mbh.* That it could forcibly be inscribed indicates that the Kurus and Pāṇḍus were actually or virtually extinct at the time. Such intrusion would not have been necessary unless a significant number of people still claimed Yadu (and Nāga) origins at the time the episode was written into the text of the epic.

Invading Greeks found the cult of Kṛṣṇa-Herakles spread over the Punjab as a major Indian worship of the fourth century BC, with Mathurā acknowledged as its principal centre. The most reasonable period as well as explanation for such a cult expansion would be the 'flight from Mathurā in fear of Jarāsaṃdha'; there is no other evidence for this, but the legend probably represents a real westward scattering of the tribes for whom the pastoral demigod Kṛṣṇa of Mathurā was a patron deity. This might account also for the venomous rage against Rajgir implied by the destruction of the *caitya* and the highly improbable killing of Jarāsaṃdha.

Kṛṣṇa had thus become a figure of much more than local importance, whose adoption into the epic would hold wider audiences. On the other hand, a Kṛṣṇa had, or was ascribed, some connection with the junior branch of the Kurus, for the sister Subhadrā had been carried off by Arjuna. This is less improbable than the killing of Jarāsaṃdha and Śiśupāla, in view of the short distance and easy transport between Mathurā and Delhi. Such a marriage by bride-capture should normally have led to hostilities unless it were customary and the alliance desirable; the parallel is with the Romans and Sabines, while the custom may underlie the disgraceful Ābhīra rape. Subhadrā may even have been the human representative of a Yadu mother-goddess, but the incident cannot be entirely meaningless. The five Pāṇḍava brothers had a wife-in-common, Draupadī, while each of the brothers had one or more other wives not in common. This indicates traditional primitive custom which became repugnant to later 'Hinduism'; indeed, Yudhiṣṭhira calmly offers uninterrupted ancestral custom as simple excuse against refinements of *dharma* (1.187.28) when the bride's indignant father tries to reason with him against the polyandrous marriage. For that matter, bride-purchase as of Mādrī (1.105.4–5) for Pāṇḍu is forbidden by the *smṛtis* as un-Aryan, along with bride-capture and polyandry. It is not necessary to postulate a Tibetan invasion to explain Pāṇḍava polyandry; the technical term *sādhāraṇī* used for Draupadī as wife-in-common is also to be found in the Ṛgveda for the goddess Rodasī, common wife to all the Maruts, indubitably Aryan group-gods (*RV.* 1.101.7; 5.56.9; 1.167,4, etc.). What is needed is change of preconceptions of what was and was not 'Aryan', at any given time and place.

Kṛṣṇa's black skin colour seems to make him a non-Aryan; but 'Aryan' was never a 'pure race'; adoption into any Aryan tribe was always permissible. His marriage—one of so many—to Jāmbavatī, daughter of a *ṛkṣa* (bear) king denotes intercourse with tribal savages of the bear totem. The Jātakas call her *Cāṇḍālī, mātā Sibbissa rājino, bhariyā Vasudeva-Kaṇhassa* (*F.* 6.421). Kṛṣṇa's *gokula* with its booly from mount Govardhana to the riverside opposite Mathurā implies a regular pastoral way of life. Horse-drawn chariots which were the principal Aryan innovation for India and the *cakra* (wheel-discus) are prominent in the saga. Therefore, if Kṛṣṇa were not an 'Aryan', his way of life was Aryan enough. The tricky aggression which he planned and his ferocity against Kaṃsa, Śiśupāla and Jarāsaṃdha would do credit to *Ṛgvedic* Indra. Only the heady *soma* drink is missing, perhaps compensated by

Balarāma's intoxication. The demigod of Mathurā can at worst be regarded as a figure intermediate between Vedic Aryans and the non-Aryan autochthones. His relation to the Nāgas is particularly interesting. The child Kṛṣṇa trampled down but spared the Nāga Kālīya who prevented occupation of the Yamunā bank and access to the river pool. With Kṛṣṇa's full cooperation, the Pāṇḍavas burned out the Khāṇḍava jungle (1.215–19) to found their new city Indraprastha (near Delhi; traditionally, the Purana Qila). The land-clearing operation is represented in the *Mbh.* as a grand blood-sacrifice to the Aryan fire-god Agni, with deliberate extermination of every creature that tried to escape the ring of fire. Nevertheless, the principal Nāga Takṣaka, Indra's special friend, had gone to Kurukṣetra (1.219.13) and so escaped the conflagration (abandoned by Indra, he was later barely rescued by Āstīka from Janamejaya's fire). Innumerable lesser Nāgas were killed. This holocaust of the Khāṇḍava forest had not been consummated earlier because Indra foiled every previous attempt by bringing down untimely rain to extinguish the fire.

If, after all this, Kṛṣṇa's elder brother Balarāma is made the primeval earth-bearing Nāga incarnate, there must have been some later synthetic accord between the group of Nāga myths and the completely hostile Kṛṣṇa saga. This would be incomprehensible without a corresponding rapprochement between the distinct but contiguous human groups that held two distinct sets of cults in respect. Balarāma's special attribute is the plough, an implement of no use to human Nāgas if they remained food-gatherers. Yet, to this day, the Indian peasant's favourite *kṣetrapāla*, guardian of the plough-fields, is the Cobra, usually carved in relief on a slab of stone. That Balarāma's biography had been locally revised to order is proved by the Jātaka version (no. 454, Ghaṭa-Jātaka). There is no mention in the Magadhan (Pāli) account of the Nāga incarnate. Balarāma does not give up the ghost on the seashore before a great concourse of Nāgas, as in the *Mbh.*, but is crunched up like an edible tuber (*F*. 4.88) by a forest demon Kālamaṭṭiya. This *yakṣa* was in fact a rebirth of Kaṃsa's pancratiast Muṭṭhika whom Baladeva had killed in the arena. The sole survivor of the tribe was the sister—not called Subhadrā but Añjanadevī.

Previous enmity between Kṛṣṇa and Indra is shown by the Govardhana episode. The multiple struggle for easily cultivable territory saw curious alliances, if the record be accepted. Jungle life of modern Nāga tribes would suggest that the *Mbh.* Nāgas were food-gathering aborigines ready to change over. There is no question of a wide-spread Nāga population; the name must indicate in a group many thinly scattered, linguistically and perhaps ethnically diverse, primitive tribesmen who had a snake totem or snake worship among other totems and worship. The Jātaka (*F.* 4.81; 5.18) appellation Andhaka-Veṇhu Dāsaputtā indicates that Kṛṣṇa's tribe was also regarded as non-Aryan barbarians in early Magadhan legend.

The original Kuru lays must have been a lament at the defeat of the nobler 'pure' Aryans (cf. the exemplary Uttarakurus of legend, 2.25.11) by upstart cousins who permitted less advanced forms of marriage. The later glorification of the Pāṇḍavas was obviously due to the victory and survival of the rude junior line. Kṛṣṇa thrust his way in, though initially part of a rival tradition, because he had a cult which outgrew the restricted territory of his original tribe. The quite unncessary coronation (17.1.8–9) by the Pāṇḍavas of a Yadu refugee named Vajra at Indraprastha, while the rightful heir Parīkṣit (posthumous son of Abhimanyu and grandson of the Yadu princess or mother-goddess Subhadrā) was to rule at Hastināpura, is too odd to be pure invention. Nothing is ever heard of this Vajra again. The simplest explanation would be the memory of a Yadu or Andhaka-Vṛṣṇi claim to some temporary occupation of at least the Indraprastha portion of Kuru-land. Similarly, there would have been no need to write the Nāga frame story into the *Mbh.* without the contemporary existence of people who were Nāgas or claimed descent from the Nāgas, as happened beyond any doubt in historic times.[14] The religious manifestation of the same process is the iconographic adoption of the *nāga* (cobra) as bed and canopy for sleeping Viṣṇu, garland for Śiva, as well as an independent cult object by himself. In production, this meant the growth of a ring (around plough-using and pastoral territories) of aborigines who gradually learned cattle herding and agriculture, and had to be assimilated to food-producing society. A handful of immigrant, food-producing, or even pastoral 'Aryans' would rapidly outnumber the surrounding aboriginal Nāga food-gatherers in a few generations because of faster breeding due to the better food supply. There is no Euhemerism involved in taking Nāga as tribal and totemic; Buddhist rules forbidding the ordination of a Nāga[15] would have been meaningless otherwise. That these legendary Nāgas could assume the form of snakes or human beings at will compares with the relations of ancestral Hokkaido Ainus to their own totem, the bear.

5. *The Kuru Genealogy*

Dhṛtarāṣṭra is only a Nāga (*F.* 6.163 ff.; clan 6.219) in Buddhist Jātakas. Kauravya and Dhṛtarāṣṭra are two separate Nāga clans as reported in *Mbh.* 1.31.13. The end of the Kuru king Dhṛtarāṣṭra by a forest fire which consumed his body, exhausted by ascetic food-gathering life in the jungle

(15.45), is peculiarly reminiscent of the Nāgas destroyed by burning down the Khāṇḍava forest. If this Bharatan king Dhṛtarāṣṭra were not in some way claimed by the Nāgas, there would be no reason to send him after death to the world of Kubera (18.5.11) who is lord of goblins and demons. The underworld Nāga Dhṛtarāṣṭra made every effort to prevent Arjuna's resurrection according to Jaimini's version of the Aśvamedha-parvan. The record is decidedly mixed here, but there is other evidence that the Aryan Pūrus had a small western Kuru branch which intermarried with local people, some of whom must have been non-Aryan aboriginal Nāgas.

The Ādi-parvan contains two Kuru genealogies in successive chapters, (1.89 and 1.90), of which the former is in standard *anuṣṭubh* metre; the next, one of the few prose passages of the *Mbh.* The verse account is brought down only to the time of Śāṃtanu of the Bharata tribe, for the birth of Bhīṣma is given in full detail as an essential part of the main story elsewhere. The prose account begins with creation and comes down not only to Janamejaya III, to whom it was being recited but to his grandson Aśvamedhadatta. In both, Pūru is the main founder. The two pedigrees do not contain a further common name till Matināra, 15th after Pūru in the second account. In 1.89, Matināra's grandmother is an unnamed *apsaras*, not supported by the second genealogy. In both accounts, the union of Duḥṣanta with Śakuntalā is made responsible for the birth of Bharata, thus became the ancestor of the great *Ṛgvedic* tribe, though the Ṛgveda does not know of this romantic detail. The first account claims that the military power of the Pañcālas drove the Bharatas under king Saṃvaraṇa from an unspecified location to a mountain stronghold on the Indus. After a thousand years, the white magic of their new priest Vasiṣtha brought them back again to dominate the earth. The genealogy continues smoothly with Saṃvaraṇa, in spite of this millennial hiatus, so that the whole episode is a clear attempt to clamp the *Mbh.* narrative onto the wellknown *Ṛgvedic* change of Bharatan priesthood from Viśvāmitra to Vasiṣtha. We then hear of Kuru, son of Saṃvaraṇa 'after whom is universally known the Kuru-wilderness (*kuru-jāṅgalam*); he, the great ascetic, made it into the holy Kuru-field (*kurukṣetram*) by his ascetic work' (1.89.43). Therefore, a Kuru, eponymous or not, had traditionally cleared and brought the wilderness under cultivation; his *tapas* (penance) is simple brahminization of a pioneer's hardships.

The second account has significant modifications. Ayutanāyi, seventh in line before Matināra, derived his name from the ritual sacrifice of a myriad men for his birth (1.90.19). Matināra's grandmother seems human enough, but his mother is here reported as the daughter of the Nāga, Takṣaka, who is the crucial Nāga in the frame-story. Matināra was wedded to none less than the river Sarasvatī, after a twelve-year *sattra* sacrifice on its banks. The river appeared personified to choose him as bridegroom. The son of this union, Taṃsu, begat Ilina upon Kālindī, which is a name of the river Yamunā. The son was Duḥṣanta, whose union with Śakuntalā is attested by all accounts, though she is called an *apsaras* only in the *Śatapatha Brāhmaṇa* (*ŚB.* 13.5.4.11; brought up by a Kaśyapa named Kaṅva). In this line, king Hastī, founder of Hastināpura, precedes Kuru, whereas the earlier account seems more logical in taking Kuru as the ancestor. One of the descendants, Parīkṣit I, married a Bāhudā named Suyaśa; Bāhudā seems mysterious as a tribal name, but there is an eastern river with that appellation. The point is worth emphasizing because the marriage of Śāṃtanu to the river Ganges led to the birth of Bhīṣma.

Pargiter (*AIHT*, pp. 134–5) rationalized such marriages with the explanation that human brides bore the same name as rivers. But he could not explain why marriage with girls bearing the names of rivers was considered dangerous as late as the *Manusmṛti* (*Ms.* 3.9), and other Hindu scriptures. It is not against modern Hindu custom. The sole reason anyone can adduce is that it was dangerous at some earlier stage to marry such 'rivers', i.e. their human representative, and the *apsarasas*. The husband was liable to be sacrificed, in older days. Kṛṣṇa killed the mother-goddess Pūtanā, presumably because she demanded sacrifice of male children. Jarāsaṃdha, who is not reported at all in Buddhist tradition (unless he be the great and good Janasandha[16] of Kāśī: *F.* 2.297–300; 4.176–8, 180; at Kurukkhetta, *F.* 6.291) was brought back whole and sound, from the crossroads at which he had been exposed in two halves as an infant to be eaten, by the demoness Jarā. This reluctant demoness, who was simultaneously a beautiful woman (characteristic of Indian mother-goddesses including Durgā-Kālī), was immediately recognized as the family goddess of the dynasty and received a cult at Rajgir (2.17.5). Whether she was related in some way to the hunter Jaras (nom. and Pāli: Jarā), whose arrow shot into the heel caused Kṛṣṇa's death, is not clear. The content of such episodes is the change from prehistory to history, from matriarchal to fully patriarchal custom. Kṛṣṇa only continued the work of Aryan Indra. Where the former had to marry as many of the goddesses as he could, the Vedic war-god had unhesitatingly smashed the cult and wagon of Uṣas on the Vipāś river (*RV*. 4.30.8–11) though the Uṣas cult remained nevertheless in the Vedas, important enough to be specially acknowledged by the *Aprī* hymns.

This accounts also for the necessity of the particular Brahmin diaskeuasis. The Brahmins as a caste have no special function in the *Ṛgvedic* hymns which they preempted later as their own special property. The Kaśyapas have clear connection with aborigines through the *prajāpati* myths and also the tortoise totem which their name indicates. It is very well known that a good many of the spurious Brahmins claim the Kaśyapa *gotra*.[17] The interdict which Hiraṇyakeśin-Satyāṣāḍha (*H. śrauta-sūtra* 10.4) places upon the Kaśyapas and Kaṇvas at feasts to the manes is no longer observed; but it cannot have been accidental. There is a clear-cut rule that if the child's *gotra* be unknown, the Kaśyapa *gotra* may unhesitatingly be ascribed. Lastly, if a child be born of a marriage between forbidden degrees, one rule would make it an outcaste Caṇḍāla while the other, seemingly more generous, says that it should be assigned to the gens Kaśyapa. This discrepancy is not so great as it seems, for the Caṇḍālas were a tribe (or several tribes) that became a low caste, due to stubborn persistence in breaking tabus kept by good Aryans; the Kaśyapas, on the other hand, rose slowly from their ambiguous position. In its own way, therefore, the exaggerated status of the Brahmins in the *Mbh*., though ridiculous pretention in a balanced food-producing society, was natural in primitive surroundings when witch-doctors and medicine-men seemed essential to collective human life. This emphasis upon superstition later kept the whole country backward; but it permitted the early formation of an integrated food-producing society beyond the tribe, with minimum violence, without the chattel slavery of Rome and Greece.

6. *The 'Epic Period'*

The five major sources now discernible for the epic text do not simplify the task of extracting history from the events reported. The Kuru-Pāṇḍu lays dealt with the same happenings from opposite points of view; the Kṛṣṇa cycle was foreign to both as everyone admits. But what do the Nāga stories represent? What can be done to restore the position before the double brahminization at Kaśyapa and Bhṛgu hands? Much more is involved here than a simple reduction of scale from the whole of India to tiny Kuru-land. Some of the minor characters have no function in the epic except to provide ancestors for historical people. The Yaudheya of *Mbh*. 1.90.83, given as son of Yudhiṣṭhira by the Śibi princess Devakī would be a gratuitous addition if he had no eponymous relation to the historical Yaudheya tribe known through inscriptions and coins. There is the major task of removing several layers of myth. Was Draupadī a mother-goddess associated with five different male demi-gods? Bhava, Rudra, Śarva are distinct gods in the Vedas, while the feminine Bhavānī, Rudrāṇī, Śarvaṇī are found in the Amarakośa 1.1.39 as epithets for Durgā. It is not surprising to read in the Mahāmāyūrī-mantra (Sylvain Lévi in *JA* 5.1915.i. 19–138, particularly pp. 40 ff.) that many of the Bharatan heroes on both sides were separately labelled the patron *yakṣas* of various localities.

This approach is promising and to a certain extent fruitful. The heroine Draupadī sprang full-grown in all her dark beauty (she was *kṛṣṇā*) from the flames of Drupada's sacrificial fire. Droṇa, a Bharadvāja, was not of woman born, *ayonisambhava*. His birth from a wooden vessel (*droṇa*) which conceived from the seed of a *ṛṣi* stimulated by sight of the bathing apsaras, Ghṛtācī, is parallel to that of Vasiṣṭha (*RV*. 7.33), and perhaps of Agastya. Droṇa's remarkable proficiency with the bow is more characteristic of the autochthonous *niṣādas* than of a proper Brahmin; the head-jewel that his son Aśvatthāman bore like any Nāga is ground for deeper suspicion that Droṇa was Aryanized in the epic. The hundred sons and solitary daughter of Dhṛtarāṣtra were born of a human mother Gāndhārī as a single ball of hard flesh, which had to be divided and placed in ghee-filled jars. There each piece matured like the foetus in its womb, and the children came fourth. Let it be suggested that all these awkward births have a higher place in savage myth than in the Aryan; the womb-jar is symbolic of the mother-goddess, while the father was originally not on the scene, generally having to be sacrificed—if indeed fatherhood was recognized at all. The accursed, unfortunate Pāṇḍu could not make carnal love to either of his two wives; the first such attempt cost him his life. His sons and Karṇa were begotten by various high Vedic gods upon Kuntī and Mādrī. The Kuru genealogy cited above is thus reduced to a miserable, garbled footnote to these vigorous, enduring myths which can hardly be called Aryan. All this brings us no closer to a solution of the initial problem.

What meaning can we give then to the 'epic period'? As a historical period for the whole of India, the name is meaningless. However, the 'Vedic period', though restricted to the Punjab, justified its name in Indian history by a significance beyond the actual territory. Development of the country beyond the Punjab, along the lines it followed for many centuries, was made possible by the warring pastoral groups with horse, chariot, plough, iron, knowledge of land-clearing and a rudimentary class-structure in the guise of caste. This meant the formation of new, viable Indian tribal states on a model which the impressive but decaying

Indus cities could not or at least did not furnish. The 'Buddhist period' is supposedly justified by extension of the new religion over the whole country; of course, the real justification for the 'period', by whatever name, is based upon its political economic changes. It meant the transition from a narrow, tribal, overwhelmingly pastoral economy with its religious expression, the *yajña* fire-sacrifice, to the powerful state mechanism (army, bureaucracy, spies and political theorists) of an empire ruling extensively over a fully developed agrarian society settled in villages, with surplus production and commodity exchange. The formal expression of the change is the Magadhan empire at the time of Aśoka. The *Mbh.* events can claim neither the wide territory nor the direct politico-economic influence. Can we give the 'epic period' some meaning nevertheless?

The *Ṛgvedic* 'snake of the deep' *ahir budhnya* may be related to the Norse Midgard snake; but he did not develop into the great Nāga Śeṣa who supports the earth, nor the Balarāma. The *RV.* represents a take-over of land with reduction by force of some tribal Dasyus to *dāsa-śūdra* caste helotage. This was the period when the Indus cities, superior in culture but weak in battle, were destroyed. The assimilation of some *dāsas* (conjectured from the Ten Kings' battle in the *RV.* and the names Divodāsa, etc.) did not reduce the violence. There was not enough water and grazing in the Punjab for all. If the report of Megasthenes has any meaning (Arrian's *Indika* 8), the Dionysos who conquered India can be equated only to *soma*-drinking Indra. This Indra-Dionysos 'founded cities, gave laws to those cities and introduced the use of wine among the Indians . . . first yoked oxen to the plough and made many of the Indians husbandmen instead of nomads and furnished them with the implements of agriculture . . .' This makes sense only if the implements were of iron, brought into general use by a second major Aryan wave about the beginning of the first millennium BC. Nahuṣa was the name of a tribe and a tribal chief (*RV.* 10.92.12; 1.100.16; 5.73.3 etc.) for the oldest Veda. Nahuṣa becoming Indra is plausible as succession to supreme Aryan leadership in war. His *Mbh.*-Puranic transformation into a snake—not a Nāga cobra but a boa constrictor—has no specifically Indian bearing except to warn against overambition and maltreatment of Brahmins. Mandhātṛ (*RV.* 8.39.8; 8.40.12.1.112.1), the sacrificer Yayāti (*RV.* 1.31.17), Ikṣvāku (*RV.* 10.60.5) and Purūravas (*RV.* 10.95) provide continuity between the final stratum of the *RV.* and the older *Mbh.* legends, though the transformation is obvious; the moral of the stories now attached to these names is Brahminical, not *Ṛgvedic* in content. That Brahmins could always serve non-Aryan patrons is shown by the blessings Vaśa Aśvya calls down upon the *dāsa* king (or kings) Balbūtha Tarukṣa and the tribe (*RV.* 8.46.32), whatever kingship meant at the time and place. The passage is roughly dated by mention of camel caravans (very rare in Vedic tradition, e.g., *RV.* 1.138). The camel—unlike the elephant—did not grow more popular in ancient India; cuneiform records show that the beast was tamed for transport and riding about 1200 BC. The names Balbūtha and Tarukṣa have a foreign ring. Dīrghatamas, son of Ucathya and Mamatā gained stature in post-Vedic tradition. His original lament literally translated (*RV.* 1.158.4–6) shows that he became a river-pilot (*nadīnāṃ sārathi*) in his old age; which may account for his floating down the Ganges to Aṅga in the *Bṛhaddevatā* and Puranic legend. The pioneer penetration of the densely wooded, unexplored, eastern territory connotated by this legend does not mean relatively peaceful combination of Aryan and non-Aryan.

On the other hand, the Nāga component of the *Mbh.* composition does imply a milder process of acculturation, localized in time and space. The locus is the Delhi-Mathurā region with some peripheral territory, particularly to the east. The time should be later than the *Yajurvedic* for Vedic gods are feeble and shadowy in the epic. The *Arthaśāstra* knows only cults of sacred cobras, not the Nāga people. The snake cults had then become orthodox worship, whereas the untamable forest savages are called *āṭavikas*. If we take the Nāgas of the *Mbh.* as less developed than Kṛṣṇa's violent pastoral followers, but ripe for the change to food-production and for the introduction of a class-structure in the guise of caste (*cāturvarṇyam*), the curious tripartite (Kuru-Mathurān-Nāga) base of the *Mbh.* legends (before the Brahmins took hold) makes sense. Any Nāgas thereafter, e.g. the Karkoṭa dynasty of eighth century Kaśmīr, follow a standard pattern as an attempt on the part of some Brahmins to ennoble their aboriginal patrons. The epic period would then be the parent crystal that gave form and model to such later developments. The alternatives are simple enough. Either take the *Mbh.* frame-story as the crude socio-historical image evoked by a fundamental change of attitude towards the autochthones. Or, abandon the historical approach altogether, in favour of pure myth. Then Nahuṣa may be referred to the brazen serpent Nehushtan, the standard of Moses later discarded by the Israelites as symptom of idolatry; Kālīya would be the Hydra despatched by Kṛṣṇa-Herakles and by earlier Mesopotamian heroes; surely Egyptian and Pelasgian snake-worship also compares with the Indian. This alternative would necessitate a separate explanation for every feature, with never-ending vacuous arguments when more than one explanation is offered. Reasons for choosing the first have been sketched here (a minor choice for relating the *Mbh.* Nāgas to the central Indian Nāga kings being dismissed in note 14).

Janamejaya's *yajña* was the normal Aryan ritual prelude to military action. His destruction of the Nāgas had historic parallels. The Kosalan Viḍūḍabha massacred the Śākyans; Ajātaśatru of Magadha exterminated the Licchavis and Mallas. Mahāpadma Nanda wiped out all remaining free oligarchical tribes of the Gangetic basin, about fifty years before Alexander's raid completed the process for the Punjab. But there was a fundamental difference. The later kings removed obstacles to the unchallenged rule of a sovereign emperor over fully developed agrarian society. Janamejaya's attack was against food-gatherers still beyond the pale. That his *sattra* was abandoned denotes some compromise which permitted relatively peaceful transition of the surviving 'Nāgas' to food production by agriculture; of course, land clearing would make their former way of life impossible. Though the gods and demons had had to employ Vāsuki as the indispensable cord at Ocean's churning (1.16.12–15), fifteen chief Nāgas of his line perished in Janamejaya's sacrificial fire (1.52.4–6). The all-god Kṛṣṇa proclaimed himself 'Vāsuki among snakes, Ananta among the Nāgas' in the famous *vibhūti* passage of the *Bhagavad-gītā* (6.32.28–9). The curious but rather irrelevant visit of the Brahmin acolyte Uttaṅka to the mysterious Nāga underworld (pit dwellings?) is reported twice (1.3; 14.55–8) for no apparent reason. The Nāgas are conspicuous throughout for their lack of weapons and of prowess (e.g., 8.63; 8.66). Their stories have not the moral content of the *Gītā*, Śānti, Anuśāsana, etc. Why, then, should Nāga genealogies and trifling Nāga episodes appear as an integral part of the great epic, the substantial *Āstīka* sub-*parvan* (1.13–53), while Kṛṣṇa's exploits and lineage were relegated to the *Harivaṃśa* supplement? Janamejaya's chief priest Somaśravas was born, like Āstīka, of a Brahmin father and a 'snake' mother (1.3.12–16). Brahmin diaskeuasta showed neither dismay nor shame at such intermixture, banned by *smṛti* and discouraged by Veda; nor were they prevented from declaring the *Mbh.* a supreme Veda and *saṃhitā* (1.1.19, 61, 204). The acceptance of Nāga kinship by Brahmins and of the stories by their audiences is much more significant than the actual details of the myths and legends. The Nāga element in the *Mbh.* indicates reciprocal acculturation. The *Mbh.* began as a Kuru lament, changed into a Pāṇḍu song of victory; absorbed Nāga myths during acculturation; acquired fresh episodes from the Mathurān Kṛṣṇa saga; and was Brahminised to some extent by the Kaśyapas, but overwhelmingly by the Bhṛgus into its present form.

The interpretation suggested in this paper can be given some archaeological support. Indian excavations have not been designed, nor executed with sufficient care, to allow collation with the oldest extant documents, as witness slipshod work at and general neglect of Rajgir. Quite sober archaeologists[18] take the Kuru empire and the *Mahābhārata* battle as historical reality, heedless of the logistic problems involved and lack of evidence for iron. B.B. Lal's exploratory digging at Hastināpura[19] is about the only bit of archaeology of use to us here; I interpret his finds as follows. The autochthones, Nāgas or not, must be identified with Hastināpura I, as the makers of the badly fired ochre-washed pottery of which a few miserable fragments were found in this lowest stratum. Lal would like to associate this pottery with the characteristic copper artifacts found elsewhere in several Gangetic hoards.[20] If so, this would further prove the fitness of the Hastināpura I people to rise to agriculture. Let it be noted that the first such copper objects (like the homo-figure) discovered on the surface were still regarded with superstition in the jungle where they lay unburied. Kuru land-clearing and occupation can only be associated with Hastināpura II and the excellent Grey Painted ware. Archaeologists puzzle over this pottery, for calling it 'Aryan' leads to contradiction in that many indubitably Aryan sites produce no trace of the grey painted ware. However, Childe[21] showed that the Aryans had no really characteristic common pottery but were remarkably good at the adoption of whatever local productive technique suited their needs. If the grey painted ware be labelled not just Aryan but specifically Pūru ceramics, the main difficulty is resolved. The label then gives information about the spread of one powerful group of Aryans. The top portion of Hastināpura II was eroded by a flood; this seems to tally with the Puranic record of Nicakṣu, fifth local king after the great battle, who therefore had to move his capital down to Kauśāmbī. The two sets of excavations at Hastināpura and Kosambī have not yet been properly collated, nor sufficiently extensive to settle this point. Much more important, however, Hastināpura II contains (according to Lal) the first traces of iron slag though unfortunately no iron objects have been found in the small portion explored. As there is no Harappan find at the site, we have here the full mechanism of the real Aryanization of India, the advance of plough, iron and Brahminism over the whole land.

NOTES

1. E.W. Hopkins: *The Great Epic of India; Its Character and Origin* (New Haven, 1920); but I use the critical edition of the *Mbh.* for citations, which will differ from those given by Hopkins.
2. J.W. McCrindle: 'Ancient India as Described by Megasthenes and Arrian', *Indian Antiquary* 6, 1876, pp. 89–90; 334, from section 8 of Arrian's *Indika*, which quotes Megasthenes (fragment L). The Persian for *aśva* would be *aśpa*, from which the Greeks would derive *spa* for the first syllable.
3. F.E. Pargiter: *Ancient Indian Historical Tradition* (Oxford 1922); cited as *AIHT* with page numbers.
4. Vedic reference material will be found handily gathered in A.A. MacDonnell and A.B. Keith: *Vedic Index of Names and Subjects* (2 vol. London 1912), though my interpretation often differs, and I have made use of other references. Viśvāmitra, the older Bharata priest, was superseded by Vasiṣtha as is reported by various commentators on Books 3 and 7 of the Ṛgveda.
5. Buddhist Pāli tradition, with supplementary information from the Mahāvastu and a few other sources is comprehensively reported by G.P. Malalasekera in his *Dictionary Of Pāli Proper Names* (2 vols., London, 1937). For the Jātakas, reference is here made with the code-letter *F* followed by volume and page of V. Fausböll's Pāli Text Society edition (7 vols., London 1877–97).
6. R.C. Hazra: *Studies In The Puranic Records on Hindu Rites and Customs* (Dacca, 1940); p. 7, footnote, refers to the unpublished Dānasāgara of the Sena king Ballālasena, fol. 4a: *mṛṣā-vaṃśānu-caritaiḥ*. In general, Hazra shows the extant Purāṇas to belong to the feudal period.
7. That this follows from analysis of the Bāvari story in the Suttanipāta has been shown in chapter IV of my book *Myth & Reality*.
8. W. Ruben: *Krishna: Konkordanz and Kommentar der Motive seines Heldenlebens* (Istanbul, 1943).
9. V.S. Sukthankar: *Epic Studies VI: The Bhṛgus and the Bhārata*; the Memorial Edition of his collected works, Poona 1944, vol. 1, pp. 278–337; reprinted from the *ABORI* 18.1–76.
10. Cf. Malalasekera's *Dictionary* in note 5 *sub* Ṭakkasilā; also, Bṛhadāraṇyaka Upaniṣad 3.3.1; 3.7.1.
11. J. W. McCrindle: *Ancient India As Described By Ptolemy* (London, Trubner 1885), to be distinguished from the work in note 2; p. 136.
12. Ibid., p. 167, section 74, with the principal city Brakhme.
13. *Myth and Reality*, chap. I, originally published without illustrations in *JESHO* vol. 4, 1960.
14. F.E. Pargiter: *The Purāṇa Text of the Dynasties of the Kali Age* (Oxford, 1913; cited here as *DKA*) for synoptic edition of text, and translation. The Śiśunāgas (pp. 20–2; 68–9) under whom Magadha rose to its high potential may or may not have been Nāgas in spite of the termination; no origin is given anywhere. For authentic Nāga kings in Āryāvarta proper, contemporaries of the early Guptas and ruling in Mathurā as well as Campāvatī, ibid., pp. 53, 73. Gupta records attest

the existence of these kings, 'exterminated' by Samudragupta according to the Hariṣeṇa Praśasti on the pillar at Prayag (J.F. Fleet, *Corpus Inscriptionum Indicarum* III, Calcutta 1888, pp. 10–17, line 21 of inscription); the son Candragupta II married the Nāga princess Kuberanāgā. The nine Nāga kings of the Purāṇas may possibly be the nine named by Samudragupta, some of whom are known by their coins (E.J. Rapson, *Indian Coins*, Strasbourg 1898, section 101; *JRAS* 1897, p. 421). The possibility of a late and specialized court redaction of the *Mbh.* for the benefit of some kings of Nāga origin has at least to be discussed, though the rise of Nāgas to kingship seems to me too late and distant from the probable centres of *Mbh.* redaction. The Śiśunāgas of Magadha (Rajgir-Patna) were off the scene a century or more before the Mauryans; they may have been Nāgas but are emphatically called *kṣtrabāndhavaḥ* in contempt by the Purāṇas, hence did not help Brahmins or Brahminism. K.P. Jayaswal's Nāga-Vākāṭaka period of AD 150–350 as an 'imperial' age (*JBORS* 19. 1933. 1.222; 289–318) is difficult to take seriously. The evidence has to be twisted—where it exists at all—in characteristic and specious Jayaswal fashion, while the contemporary Kuṣāṇa, Śaka and Sātavāhana kingdoms would have restricted the territory to some parts of central India. The first Puranic Nāga king is given as Bhogin (*DKA* above, pp. 49, 72), *Śeṣasya Nāga-rājasya putraḥ*, after Sātavāhana rule had faded away; his rule and that of his archaeologically verifiable successors was close to Vidiśā, remote from the Bharatan scene. We have referred to the Kārkoṭa dynasty in Kaśmīr. The theme of the eleventh-century poem *Navasāhasāṅka-caritam* is the marriage to the Nāga princess Śaśīprabhā of Sindhurāja, father of Bhoja of Dhārā. The Nāgarāja given as author of the *Bhāva-śatakam* (*Kāvyamālā* 4, pp. 46–64) cannot be the contemporary of Samudragupta as some would take him; he is not before Bhoja in time and probably not far from Dhārā in place. It would seem that the Nāga myths in the *Mbh.* had wide acceptance in the middle ages; presumably, the Nāga element of the epic itself derived from popular demand supplied by the Brahmin redactors, not the necessity of flattering some king and his court.

15. *Mahāvagga* 1.63, trans. *Sacred Books of the East*, vol. 13 (Oxford 1881), pp. 217–19. The actual question asked of the novice is to be 'art thou human?'; the story clearly bans initiation of Nāgas into the Order. The stanzas at the end of the *Mahā-parinibbāṇa-sutta* of the *Dīgha-Nikāya* state that the eighth portion of Buddha's relics claimed by the Koḷiyans was worshipped by Nāgas at Rāma-gāma, the Koḷiya capital. So, either the Koḷiyans were already extinct (like the Būlīs of Allakappa who shared in the relics but left no other record) or they were labelled Nāgas as aborigines—which seems the likelier hypothesis. The complication here is that *nāga* can also mean 'elephant'.
16. This name is undoubtedly represented in the *Mbh.* as Jalasaṃdha, borne by two different characters. The lesser was one of the hundred jar-born Kaurava sons of Dhṛtarāṣṭra (1.108.4^{b}); a Jarāsaṃdha occurs in the same list of brothers at 1.108.9^{a}. Both readings are a bit doubtful, but the Kaurava Jalasaṃdha was among fourteen brothers killed off in a single engagement by Bhīma (6.60.24–8). The other Jalasaṃdha is given as a great chariot-fighter, king of Magadha

(5.164.24), whose name has the strong southern variant Jarāsaṃdha in 1.177.11.[c] This hero was killed fighting from an elephant, not a chariot (7.91.24–50), by the Yadu Sātyaki who has special prominence as the only survivor on the winning side except the five Pāṇḍava brothers and Kṛṣṇa himself. It may be that the killing of Jarāsaṃdha by Bhīma, with Kṛṣṇa of the Yadus looking on, was compounded of the stories of how the two Jalasaṃdhas met their end. The king bewailed in 11.25.7 by the Magadhan women on the corpse-strewn Bharatan battle-field was named Jayatsena; the corpse cremated (in 11.26.37[d] along with whatever carrion-eaters had spared of the other glorious dead) again bore the name Jalasaṃdha. It is tantalising to note that the original sources were less confused and had some contact with history. There must have been some chronicle dating the end of the Kurus and of the Yadus. Otherwise, Gāndhārī's curse that Kṛṣṇa would come to a solitary, inglorious end in the forest, after all his kinsmen and progeny had been wiped out, precisely thirty-six years after the execration, would seem pointless. The Yavana warriors slaughtered by Sātyaki wore bronze and brass armour (7.95.35[ab]). As no other fighter in the battle showed this much sense, the stanzas must have been written after Alexander's raid, perhaps after Menander's.Sātyaki was attacked immediately afterwards by a savage mountaineer contingent that used only stone weapons, a prehistoric fashion with which no one on either side was familiar.

17. The *Gotra-pravara-Mañjarī* of Puruṣottama translated by J. Brough: *The Early Brahmanical System of Gotra and Pravara* (Cambridge, 1953) reports (after Baudhāyana) the ascription to the Kaśyapa *gotra* of a child born of a union against *gotra* exogamic rules (pp. 55, 203–4). On p. 197, the teacher's gotra is to be taken, if the disciple is ignorant of his own—which casts some light upon the supposed strictness and immutability of Brahmin observances. Chentsal Rao's edition of the text (p. 187) gives a note: *gotrasya tv aparijñāne Kāśyapam gotram iśyate* which makes the Kaśyapa gens a residuary for all doubtful Brahmins. Census enumerators used to report that highly improbable claimants to Brahminhood in the hinterland generally offered the Kaśyapa *gotra*.
18. D.H. Gordon: *The Prehistoric Background of Indian Culture* (Bombay, 1958). The survey is very good for the frontier region of what is now Pakistan, but a bit weak in the explanation of Indian culture as such. Though finding no evidence for iron before 400 BC. Gordon noted the excellence of Indian steel swords as reported by Ctesias and Herodotos for the end of the fifth century BC (Artaxerxes Mnemon). This surely implies a good supply of iron by 600 BC, and knowledge of the metal even earlier.
19. B.B. Lal: *Ancient India* 9.1953.80–102; 10–11. 1954–5.151.
20. V.A. Smith: *IA*, 34.1905. 229–44; 36. 1907.53–5. B.B. Lal: *Ancient India* 7.1951.20–39. *JBORS* vol. 1, 2, for the modern superstition.
21. V. Gordon Childe: *The Aryans* (London 1926).

20

The Avatāra Syncretism and Possible Sources of the *Bhagavad-Gītā*[*]

1. In two previous communications, the existence of an element in ancient Indian tradition, hostile to Aryan and Kṣatriya superiority, has been demonstrated (*JBBRAS* vols. xxii, xxiii). This clearly Brāhmaṇical element has resulted in a complete rewriting of some important stories. Some of this revision is post-Buddhistic, but its beginnings can be shown to go back to a period centuries earlier. Therefore, both the caste system and the work of revision must be regarded as consequences of the Aryan conquest, after which the priest class of the conquered was assimilated to the priesthood of the conquerors. This thesis implies that some even of the later documents contain a germ of pre-Aryan myth and legend, sometimes with a historical foundation. To restore this tradition in the face of successive revision as in the purāṇas and to evaluate its former historical content means an analysis far beyond the scope of this note. Here, I merely call attention to another stage of the process itself. Of course, alternative explanations such as 'nature-myths' have been offered for most of the legends, but they explain nothing, and it is more plausible to assume that the similarity with a natural event reinforced a story that had some real happening as its basis in human history; in some sense, the oldest myths record human experience.

Crucial in the peculiar Brāhmaṇic synthesis in its present form is the *avatāra* theory, the incarnations of Viṣṇu. These are generally taken as the following ten: (1) *matsya*, the Fish; (2) *kūrma*, the Tortoise; (3) *varāha*, the Boar; (4) *narasiṃha*, the Man-Lion; (5) *vāmana*, the

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[*] *Journal of the Bombay Branch of the Royal Asiatic Society*, vols. 24–5 (1948–49), pp. 121–34.

Dwarf; (6) Paraśurāma; (7) Rāma; (8) Kṛṣṇa; (9) Buddha; (10) Kalki. Of these, the last is considered to be in the future, Buddha is definitely a historical personage, while the others seem more and more legendary the further back we go in the series. The list is not accepted in the earliest times, nor is it rigid, the most inflated being in the *Bhāgavata Purāṇa* 1.3 (more ornate, in *vasantatilakā* metre, 2.7), with twenty four official incarnations specially mentioned among an infinity: *avatāra hy asaṃkhyeya hareḥ sattva-nidher dvijāḥ / yathā vidāsinaḥ kulyāḥ sarasaḥ syuḥ sahasra-śaḥ* //(*Bh. P.* 1.3.26). The Purāṇas in general show the infiltration of other incarnations such as Pramati in the Matsya Purāṇa, which can be accounted for only by the increasing popularity of the *avatāra* syncretism, in addition to the co-existence of several different historical or mythological legends which could not be denied nor forgotten; these had necessarily to be combined to prevent conflict, which meant in most cases pseudo-chronological arrangement of stories along with a universalization of local events. At an early stage there are naturally several such competing arrangements, which allows us to see the patchwork. In this note, I draw principally upon the critical edition of the *Mahābhārata*, referred to as *Mbh.*, the *Bṛhaddevatā* (*Bṛd.*), and the oldest Brāhmaṇas.

2. The *Bhagavadgītā*, surely a climactic synthesis, contains two passages giving first the special representations of the god called *vibhūtis* (10.19–42 = *Mbh.* 6.32.19–42), the best of each category; then another showing his universal appearance, the *viśvarūpa* (11.13 ff.). Some of the numina point to a definite sectarian influence: 'Of Vedas I am the *Sāmaveda* . . . of the great ṛṣis I am Bhṛgu . . . Prahrāda among the Daityas . . . among the sages Vyāsa, Uśanas Kavi among the poets . . .'. The reference to Bhṛgu with the superfluous occurrence of Paraśurāma in the great epic led V.S. Sukthankar to his theory of Bhārgava redaction of the *Mbh.* (Epic Studies VI, *ABORI* 18.1–76; Sukthankar Memorial Edition 1.278–337). The *Sāmaveda* again may indicate some particular Brāhmaṇical clan; Vyāsa, reputed author of the *Mbh.* is an *avatāra* in the *Bhāgavata* and other Purāṇas, where he or his pupils so often come as narrators. The inclusion of Prahrāda is the strangest of all, because he is the worshipper of Viṣṇu, saved by that god's Man-Lion incarnation. The proper name of the deity at the beginning cannot have been Viṣṇu because that too is a special case: 'I am Viṣṇu among the ādityas' says the list of *vibhūtis*.

The tendency to insert more and more incarnations continued long after the period when the *Mbh.* critical text developed, as is seen by the fact that the entire Vulgate passage relating to the Boar incarnation appears after *Mbh.* 3.142 only in Bengali and Devanagari groups of MSS. The quite incongruous quarrel between the Rāmas, both incarnations of the same deity, is again an addition in the same BD groups of MSS; significantly, it is Rāma Dāśarathi the kṣatriya who prevails over the Brahmin Paraśurāma, by showing his *viśvarūpa*. These interpolations not only point to a continuous living tradition but prove that not all the incarnations were admitted to equal validity at the earliest stages. Paraśurāma, in spite of the Bhārgavas, cannot have been a full *avatāra* for a long time. Finally, it is easy to show that the earliest incarnation did not relate to Viṣṇu-Nārāyaṇa but Prajāpati. *Mbh.* 3.185 gives the story of the Indian Noah, Manu Vaivasvata, saved by the Fish incarnation from the flood, along with the seeds of all future life. The legend is supposedly of Semitic origin, not Indian at all. After Manu's ark has been tied to a peak of the Himalayas the horned Fish says to him: *ahaṃ prajāpatir brahmā matparaṃ nādhigamyate matsyarūpeṇa yūyaṃ ca mayāsmān mokṣitā bhayāt* (3.185.48). The Śatapatha Brāhmaṇa i.8.1.1–6 gives a much shorter version of the flood, where the horned fish is not an incarnation of any god as far as the record goes, and Manu is saved alone in his ark. Now Brahmā and Prajāpati might be equated, but never to Nārāyaṇa or to Viṣṇu. The transference is obviously a later act, long after the cult of Brahmā was dead. We may attempt to trace the process in one case, namely the two *Gītā* passages mentioned.

3. The immediate source of the *Gītā* is also the prime source of information about Nārāyaṇa himself, a god of the waters, which is not surprising when we consider that the first three incarnations are associated with a flood or the sea. For our purpose, the vision of Mārkaṇḍeya in *Mbh.* 3.186, 187 is the most important prototype of the vision of Arjuna, while we may note in passing that the ṛṣi himself is a Bhārgava. The sage walks alone upon the flood that had destroyed the entire world at the end of the *Kali* age and sees the divine infant supported on the branches of a Nyagrodha tree above the waters.[1] Drawn into its mouth, he sees the entire universe within, intact with its full complement of beasts, men, and gods (3.186.39–112), whereas Arjuna observes the tremendous figure of Kṛṣṇa from without. In both cases the destruction is illusory. In 3.187, the god speaks in much the same tone as Kṛṣṇa proclaiming his *vibhūtis*, but the representation is not so specialized here as in the *Gītā*; in some cases the god is the origin rather than the manifestation itself. For the parallels to be more easily drawn, a portion of the passage is given here in translation:

The God spoke: 'O Brāhmaṇa, even the gods do not know me in essence. Out of love for thee I shall relate how I create this (1). Thou art an ancestor-worshipper, also hast thou yielded unto me; furthermore, thou hast seen my presence, and thy asceticism is great (2). The waters are called *nārā*, the appellation having been made by me; thence am I called Nārāyaṇa for therein is ever my dwelling (3). O best of the twice-born, I am Nārāyaṇa by name, am the origin, the eternal, the immutable: the creator of all things and their destroyer (4). I am Viṣṇu, I Brahmā, and I Śakra (= Indra), the chief of the gods; I am king Vaiśravaṇa, and also am I Yama, lord of the departed (5). I am Śiva and Soma, and Prajāpati Kāśyapa; I am the creator and the arbiter of all fate; I, o best of the twice-born, am the fire-sacrifice (6). The fire is my mouth, the earth my feet, the sun and moon my eyes; the sky with its (cardinal) directions my body, the wind is my mind (7). By me hundreds of proper offerings have been made with the giving of many fees; the Veda-learned sacrifice to me in the divine sacrifices of the gods (8). On earth, the chiefs among the kṣatriyas, lords of the earth yearning for heaven, sacrifice to me as do the vaiśyas desirous of heaven (9). This earth, extending to the four seas, embellished by Meru and Mandara (mountains) do I support, having become the (great cobra) Śeṣa (19). In ancient times it was by me, having assumed the Boar form, that this world, sunk under the waters, was heroically uplifted (11). Having become the volcano, it is I, o best of the twice-born, who drink up the waters and create them again (12). By (my) prowess brahma (became my) mouth, kṣatrahood (my) arms, the vaiśya-hood sheltered in my thighs; my feet are worshipped by the śūdras (13). The *ṛgveda, sāmaveda, yajurveda*, and even the *atharvan* originate in me, and it is in me that they re-enter (14). It is me alone that the Brāhmaṇas worship and meditate upon, they that regard calm as supreme, have liberated souls, are freed of lust, wrath, hatred; detached, cleansed of sin, men of character, without pride, ever knowing the eternal principles (15, 16). I am the flame of destruction, I am the destroyer Yama; I am the sun of destruction, I am the destroying wind (17). Know, o best of the twice-born, that these seen in the sky in the form of stars are my own symbols (18). Know that the gem-bearing oceans and seas, the four principal directions, are my garments, my bed, my dwelling (19). Lust, wrath, joy, fear as well as cupidity—know excellent one that all of them are really my forms (20). Whatever men obtain, O Brāhmaṇa, by whatever handsome action—truth, charity, austere penance, non-killing towards all living beings—is by my regulations. Dwelling in my body, their understanding permeated by me, do (men) move, not by their own free will (21–2). The twice-born, calm of soul, wrath-conquerors, complete scholars of the Vedas gain in sacrificing by various rites (23). This is not to be gained by learned men with evil action, conquered by greed, mean, un-Aryan, impure of soul (24). Know me to be that great reward, the very step of righteous action, difficult to gain for foolish Brāhmaṇas, the path followed by renunciation (*yogaiḥ*) (25). Whenever the way of righteousness becomes faint, and unrighteousness flourishes, then o excellent one do I create a soul (26). Whenever Daityas bent upon killing and Rākṣasas not to be killed by the highest gods come into being (27) then do I take birth in a house of fair actions; having entered into a human body, I restore the tranquility of all (28). Having created gods and men, Gandharvas, Uragas, Rākṣasas, and all immovable creation I exterminate them by my own illusion (*ātmamāyayā*) (29). At the time of action, having thought upon a body, I create again by entering into a human form for the re-establishment of moral bounds (30). Having assumed white (colour) in the *kṛta* age, yellow in the *treta*, red in the *dvāpara*, in the *Kali* (I become) black (31). At that time unrighteousness becomes three parts (out of four). The time of the end having come I, becoming most cruel Death, destroy the threefold world, all stable and mobile creation (32). I am he of the three (world-covering) strides, the soul of all, bearer of happiness to all the world; the conqueror, all-pervading, infinite, the thriller (*hṛṣīkeśa*), the bestrider (*urūkrāmaḥ*) (33). I alone turn the wheel of time, I am the formless *brahman*; I extinguish all creatures, I am the striving of all the world (34) . . .'

The passage does not end here, but we have enough upon which to comment as well as to prove that the development parallels that of the *Bhagavad-gītā*. The question of priority is settled by the traditional priority of Mārkaṇḍeya alone with the fuller development and intricate construction of the *Gītā*, which must be the later document. The obvious parallels may be drawn by anyone.

4. The first point to note is that the god is new at the time of writing. He is known to Mārkaṇḍeya alone, having apparently never been heard of before. As we shall see later, 'seeing' the god is a form of acknowledgment. Identification with Viṣṇu, Brahmā, Indra and others as in stanzas 5.6 above indicates that the others are the older, or at least the better-known gods, and this is supported by the negative evidence of all our documents, none of which know of a god Nārāyaṇa in say, the Vedic age. However, the claims in stanzas 6–8 above might not be so purely formal as they seem, for we have the Puruṣa Nārāyaṇa of the Śatapatha Brāhmaṇa exhorted by Prajāpati (xii.3.4) to offer sacrifice, and actually associated in explicit terms with the gruesome and soon outmoded but undoubtedly important human sacrifice, Puruṣamedha, in Śat. Brāh. xiii.6. The separation between *nārā* = *puruṣa* and Nārāyaṇa the god had

not yet taken place; so the exalted position of the *puruṣa* in the Śatapatha Brāhmaṇa, (following *RV*. x.90—ascribed to the ṛṣi Nārāyaṇa) though apparently a sectarian addition, may be a manifestation of the Nārāyaṇīya tradition in its older form. Certainly the Puruṣasūkta hymn[2] *RV*. x.90 is one of the sources we are seeking. The approach would be quite natural for any Brāhmaṇa sect that desired to adopt some new worship, or to make it popular. While the infant flood-god may logically claim to have been incarnated in a Boar form (11 above, but *varāha* can also mean bull, ram, or crocodile; the last would be better), the claim contradicts 26–8 in that he is not then born in human form in some good family. Stanza 13 is a good Brāhmaṇical modification of a famous *ṛk* from the Vedic *puruṣasūkta* hymn, *RV*. x.90.12, while 15, 16, 21–5 are obvious Brāhmaṇic adaptations of the social philosophy inherited from Buddhism, hence close to the *Gītā*. One might say that both the diversity and unity of the Hinduism we know originate here; in any case the beauty of the scheme is evident, for all difficult ritual or observances are replaced by one supreme virtue, faith in the all-pervading god. Flexibility in practice, rigidity in theory, contempt for mere logical self-consistency, which characterize the religion, are clearly displayed in their full vigour.

Stanza 14 of the quotation shows that the Vedas are not eternal, being subject to decline and resurgence. This does not seem to be stated merely for the sake of conformity with the rest of the passage, but actually shows some acquaintance with historical development, leading us to suspect pre-Aryan tradition. Even previously, in *Mbh*. 3.138.10, Bharadvāja says to his dead son; *brāhmaṇānāṃ kilārthāya nanu tvaṃ taptavāṃs tapaḥ / dvijānām anadhītā vai vedāḥ sampratibhāntv iti //*. That is, the Vedas are something sought out by the Brahmins, not their original possession and study. In *Mbh*. 3.148.10 ff. Hanumān narrates the *yuga* scheme to Bhīma, leading up to *tāmasaṃ yugam āsādya kṛṣṇo bhavati keśavaḥ /* (3.148.17), which is really the point of the four colours adopted by the god in the four ages, as in śloka 31 above. Mārkaṇḍeya proceeds to tell the Pāṇḍavas in *Mbh*. 3.187.52 that their companion Kṛṣṇa is actually the god: *sa eśa kṛṣṇo vārṣṇeya purāṇapuruṣo vibhuḥ /*. Only after that do the Pāṇḍavas recognize and salute the divinity of their companion and friend.[3] How old the documentation might be we cannot say; the reference in *Mbh*. 3.189.14 where Mārkaṇḍeya says that all this has been said earlier by him in the Vāyu is more or less verified by the extant form of that purāṇa. Sukthankar's critical notes to the Āraṇyaka-parvan give further interrelationships with the Purāṇas for that Parvan.

It still remains to point out that the theory as a whole does not hold water at all if all the *avatāras* (not mentioned in their totality in the passage translated) are taken together. There is no mention of *avatāras* in other colours than black, and indeed none would be necessary in the other ages, for morality had not then gone down to its lowest level. The dark *avatāra* Kṛṣṇa is clearly meant to be explained by this, but even he has no proper function. The *Kali* age, strictly speaking, begins with the coronation of Parīkṣit after the great war ended, which means after Kṛṣṇa's function, if any, had ended too. The entire *avatāra* comes before the *Kali* age, so that the resultant change is from good to evil; neither Mārkaṇḍeya's nor Hanumān's explanation can be true. There is no general oppression of the type mentioned in the famous stanza *yadā yadā ca dharmasya*, 26 in the translated passage and found also in the *Bhagavad-gītā* (4.7). Only later do we find a rather lame explanation that Kṛṣṇa was born to wreak destruction upon the Kṣatriyas by causing dissensions among them, for they had become too powerful and insolent; apart from the implication that Brāhmaṇas were hostile to the warrior caste, this seems rather a poor aim achieved by dubious means, since a previous incarnation Paraśurāma had destroyed all the Kṣatriyas twenty-one times! In point of fact, Paraśurāma is not yet an *avatāra* in these books of the *Mbh.*, merely a hero of the Brahmins, and in particular of the Bhārgavas. The first five *avatāras* can hardly be regarded as 'born in a good family'. In other words, the Nārāyaṇīya passage is oriented completely towards the explanation of Kṛṣṇa alone, casually mentioning the Boar as a previous incarnation, though claiming in powerful tones identity with a universal principle. As *yuga-pravartaka*, however, the great avatāra is a total failure, for he makes the wrong sort of an epoch, changing from better to worse.

The periodic recurrence of a flood followed by a new form of life may seem familiar and natural to anyone brought up in a land where the worst of successively more distressing seasons ends in a virtual flood with the onset of the monsoon. Still, this is the only monsoon country where the flood (and therefore creation-) myth seems periodic, which leads one to believe that several originally distinct flood-legends must have been combined. The great figure of Prajāpati which is so prominent throughout the Śatapatha Brāhmaṇa creates the terrestrial world out of the shell of the universal egg, (but in Śat. Brāh. xi.1.6, by words, after himself issuing from the flood-borne egg) through a curious intermediary; 'The juice which flowed from (the shell of the egg squeezed by Prajāpati) became a tortoise. This whole earth dissolved itself all over the water: all this universe appeared as one form only: namely water' (Śat. Brāh. vi.1.1.12). When we see that the tortoise in vii.5.1.1–2 is an integral part of the fire-altar, this simple tale seems to be the origin of the Tortoise incarnation, which would thus really be a flood-avatāra. We read in the Śat. Brāh. xiv.1.2.11. for indeed only so large was this earth in the beginning, of the size of a span. A boar named Emūṣa raised her up, and he was her lord Prajāpati'. The infant flood-god Nārāyaṇa proclaimed himself Kāśyapa Prajāpati in *Mbh.* 3.187.6 above, and Kāśyapa has also the meaning of a tortoise. Therefore Emūṣa could also be a *prajāpati*, the creator for those clans who regarded themselves as descended from the boar, while the tortoise group would prefer *kāśyapa*. The flood not being mentioned in the Emūṣa passage of the Śat. Brāh. seems proof of a different tradition later combined with the flood and the second creation. In any case these flood *avatāras* can only be regarded as originally having been forms of Prajāpati, not Nārāyaṇa. Specifically, the Ādiparvan version of the ocean-churning story gives special prominence to Nārāyaṇa, but the Tortoise is there not as *avatāra* of any deity, being merely the great tortoise-king (*Mbh.* 1.16.10). The Mohinī form assumed by Nārāyaṇa to cheat the Asuras out of their share of nectar has no place in the official list; only the Boar appears again as the god incarnate (*Mbh.* 1.19.11). On the other hand, Garuḍa, who must have had a cult powerful enough to justify the space allotted in the Ādiparvan to tales of his prowess, never rises to the status of an incarnation, being made the *vāhana* of the god, which does not quite fit the story of the same god sleeping on the flood or upon the cobra who floats on the waters.

The Jain and Buddhist traditions have no flood and no avatāras. However, the perfections (*pāramitās*) practised by the Buddha in previous births and illustrated by the huge collection of Jātakas, the six great former Buddhas (*Mahāpadānasutta*)—the last three being Brahmins—and such accretions show a certain influence of Brahminism; to a lesser extent, but more naturally, the inflated list of Jain Tīrthaṃkaras shows the same effect. An exception to my statement is to be seen in the *Brahmājalasutta* (Dīgha-nikāya 1), where we do have a flood, but the 'creation' that follows it is fictitious, being imagined by a Brahmā who is merely the first of a series of a fallen gods. Seeing that the *sutta* is later than the *Sāmaññaphala* that follows, we have here just an acknowledgment and twisting of an extraneous legend for Buddhist purposes. In general, the wheel of time turns to bring on a period of decline, and further to one of resurgence. With the Buddhists (*Aggaññasutta* and *Cakkavatti-sīhanāda-sutta*, Dīgha-Nikāya 27 and 26) the decline and resurgence are accelerated by evil and good *karma* on the part of the human beings that inhabit the earth. It cannot be denied that both these religions are Indian, and that their myths are not in any way more open to the suspicion of foreign influence than the Brahmin stories. In conformity with this, we get another totally different account of the *Kali* age and its end, by Mārkaṇḍeya himself, in *Mbh.* 3.188.89 to 3.189.2. This is set in the future, there is no intervening flood nor universal destruction, the evil phenomena that were against the course of nature pass merely with the passage of time *kālāntare*. But there does appear a Brahmin avenger Kalki-Viṣṇuyaśas just after the *Kali* age, too late this time as Kṛṣṇa was too early, who slaughters the heathen (in later accounts Jains and Buddhists) to make the world safe for Brahminism. His birth is proper: *saṃbhūtaḥ Sambhalagrāme brāhmaṇāvasathe śubhe*, but it is again notable that the Mārkaṇḍeya narrative does not dare call him an *avatāra*. The Kalki episode has all the earmarks of a historical event disguised as a prophecy. We do know of a *kṛta* or Kalki era which coincides approximately with the Vikrama era; there is very good reason to believe in the occurrence of several local conflicts against invaders, from what remains to us of historical records, including such stories as that of the Jain ācārya Kālaka. If the event had not been local, it would have been better recorded; but it was important enough to give some group of Brahmins cause for gratitutde, sufficient to preserve and exalt the name of the hero. I have already pointed out that the evils of the *Kali* age as described by Mārkaṇḍeya in *Mbh.* 3.186 and again in 3.188 have as a source the similar passage in the Harivaṃśa, or some other narrative from which all three are derived. Direct comparison proves that the Harivaṃśa record in this case is older, and nearer to history; the mention of Puśyamitra under the title of *senānī* as one who would perform the horse-sacrifice in the *Kali* age[4] (*Hv.* 3.2.40) definitely puts Kalki at a later period, and the estimate of the first century before the Christian era is not therefore unreasonable. The Kalki (=*Anu-Bhāgavata* 3.8.1 ff) purāṇa shows this hero promoted to a full incarnation, first fighting and then allied with a Sātavāhana (= Saptivāhana named *Śaśidhvaja*), which is a later account but added support for our date. That Kalki still remains a future messianic avenger is due to his comparative obscurity; originally it was necessary to put the whole account as a prophecy in order to keep the main narrative at the time of the great war, while adding to the authority of the *Mahābhārata* by inclusion of an episode well-known to the diaskeuasts. Closer identification of Kalki would lead to information about the time of the redaction and perhaps the place; the fact of a Brāhmaṇical renaissance is clear.

5. The Child floating on the waters does not identify himself with the Vedic 'child of the waters' Apāṃ Napāt, equated in *RV.* ii.35 to the fire,

which comes from the lightning born in the water clouds. The Dwarf incarnation can, even originally, be ascribed to Viṣṇu. Śat. Brāh. i.2.5.1–7 shows that *Mbh.* 3.187.33 above is related to the *Bṛd.* ii.64 (part of the introduction), where Viṣṇu is called the three-strider meant in *tredhā nidadhe padaṃ* of *RV.* i.22.17, words ascribed to Medhātithi (cf. also Śat. Brāh. v.4.2.6, vi.6.4.1, vi.7.2.10; i.1.2.13, iii.6.3.3). Still, there is no early mention of Nārāyaṇa while *kṛṣṇa* is a Vedic adjective for the dark enemies of the Aryans. Viṣṇu in *Bṛd.* v.48 is the twelfth Āditya, (a list expanded from the 8 of *RV.* x.72, *Bṛd.* vii.114) and an associate of Indra in the killing of Vṛtra (*RV.* viii.100). The four *yuga*-names occur in Ait. Brāh. vii.15, but Keith differs emphatically from Sāyaṇa in maintaining that they are here names of the four throws of dice. His argument has little value, for the whole section is a later addition. Ait. Brāh. vii.18 says that the Andhras, Puṇḍras, Śabaras, Pulindas and Mutibas descend from those fifty sons of Viśvāmitra who had been cursed. The list has much in common with that in *Mbh.* 3.186.30 (kings of the *Kali* age!), which again shows that we are dealing with late sources, coming down to the Christian era in history. Therefore, the fact that the Ait. Brāh. starts by putting Viṣṇu first (cf. also Śat. Brāh. xiv.1.1.5 ff.) and Agni last among the gods merely goes to prove a later redaction. As for the two Rāmas, *RV.* x.94.14 seems to refer to an *asura* king Rāma; *RV.* x.110 is ascribed by the Anukramaṇi to Paraśurāma (or his father) and shows nothing either of the *avatāra* nor of the supposed Kṣatriya-killer. Rāma Aupatasvini is a sage in Śat. Brāh. iv.6.1.7, and Rāma Vaiyāghrapadya in the Jaiminīya Upaniṣad Brāh. Rāma Dāśarathi must have been some eastern hero. The name itself is old in times of the Buddha, as for example Uddaka Rāmaputta.

Some roots of the Man-Lion incarnation of Viṣṇu and the Hiraṇyakaśipu episode clearly go back to a legend of Indra. Namuci receives a similar promise of inviolability, but is afterwards killed by Indra with foam as a weapon (Śat. Brāh. xii.7.3.1–3, *RV.* viii.14.13). In some versions of the Narasiṃha story, Hiraṇyakaśipu is not killed but converted. To restore the original form of such a tale would necessitate a simultaneous critical and comparative edition of all the purāṇas. The whole Southern Recension of the *Mbh.* has a significant addition about the Dwarf incarnation, to the Sabhāparvan (Crit. Ed. App. I, no. 21, inserted after 2.35.29); there, Namuci is pushed down into the nether world, like Bali, along with Śambara and Prahrāda—both enemies of Indra and killed by that god in older legend.

That the god in *Mbh.* 3.187.10 himself becomes the cobra Śeṣa to support the earth is again an earlier step in the synthesis which later converts him into the god who sleeps upon the cobra that floats on the waters. Both serve to absorb the presumably aboriginal element of cobra-worship. A similar general trend is to be observed in the detailed iconography of our gods, with the *praharaṇa, vāhana*, and companionship of each deity, which serve to assimilate as well as subordinate minor cults. We know that composite deities like Hari-Hara, and perhaps Gaṇeśa may serve the same purpose, but whether the three-headed Tvāṣṭra and the four-headed Brahmā[5] carry the procedure far back into pre-Aryan times cannot be said without further evidence. The cobra might be related to the Vedic *ahi budhnya*.

The main principle of *bhakti* needs only a suitable vehicle, which is made more attractive by aggrandizement, and in any case raised by intense devotion to an exalted position. Therefore, grouping deities around a central figure may be the first step towards their final identification. *Bṛd*. i.122 has already begun to use ambiguous language in such grouping when it says 'Indrāśrayas tu' of Parjanya, Rudra, Vāyu, Bṛhaspati, Varuṇa, Ka, Mṛtyu, and many others, among them Apāṃ Napāt. The god who is above everything, who can do anything without affecting his own sanctity is originally Indra. His position arose from the peculiar historical development of Aryan conquest and Brāhmaṇical assimilation, for a destructive chieftain had to be worshipped as a god by those priests whose very civilization he had destroyed. This may be the origin of Nārāyaṇa's impressive characteristic: he who destroys as well as creates. The Puruṣa of *RV*. x.90 is not a destroyer.

6. The Āraṇyaka-parvan passage quoted earlier begins: *Kāmaṃ devāpi māṃ vipra na vijānanti tattvataḥ*; this is surely the main theme of the *Bhagavad-Gītā*, the true realization of the supreme deity in essence. But we have precisely the same attitude in the earliest Upaniṣads, known to be among the source of the *Gītā*, where the aim originally seems to have been the realization of *brahmā* and *Brahman*. In one notable case, however, this has shifted to Indra and the similarity to the principle of the *Gītā* is so remarkable that even the great Śaṃkara saw fit to explain this passage in the Brahmasūtra commentary. In the Kauṣītaki Brāhmaṇa Upaniṣad, Indra says to Pratardana Daivodāsi: *mām evavijañīhy etad evāhaṃ manuṣyāya hitatamaṃ manye / yan māṃ vijānīyāt / triśīrṣāṇaṃ / vāṣṭram ahanam aruṇmukhān yatīn sālāvṛkebhyaḥ prāyacchaṃ bahvīḥ sandhā atikramya divi prahlādīyān atṛnam aham antarikṣe paulomān pṛthivyāṃ kālakhāñjān / tasya me tatṛa na loma ca mā mīyate / sa yo māṃ vijānīyān nāsya kena ca karmaṇā loko mīyate / na mātṛvadhena*

na pitṛvadhena na steyena na bhrūṇahatyayā nāsya mukhān nīlam na vetīti. // The passage sublimates to a divine plane the actual position of the ruling Kṣatriya and his enemies, Brahmins or otherwise.

The theme *yan māṃ vijānīyāt* is unmistakably that carried over into later times, along with the explicit statement (which has necessarily to be modified): that the god-knower, like the god, suffers from no sort of sin that he might commit. It is most interesting to trace back this particular passage through the ancient source material that we still possess. The Ait. Brāh. vii.27 says, through the mouth of Rāma Mārgaveya '. . . the gods excluded Indra (saying) "He hath misused Viśvarūpa, son of Tvaṣṭṛ, he hath laid low Vṛtra, he hath given the Yatis to the hyenas, he hath killed the Arurmaghas, he hath contended with Bṛhaspati", then Indra was deprived of the Soma drinking . . .' The list has added the killing of Vṛtra, and says that Indra was punished, which contradicts the Kauṣītaki Brāhmaṇa Upaniṣad, while the Kauṣ. Brāhmaṇa itself which so often follows the Ait. Brāh. closely is silent as to the entire performance. Now the position of Vṛtra is that of a demon of darkness in the Vedas but already in the Śatapatha Brāhmaṇa he is also the originator of the first three Vedas, or at least the possessor of formulae of all three kinds (Śat. Brāh. v.5.5.1–5). The Tait. Saṃh. ii.1, and ii.4 (like Śat. Brāh. v.5.5.2, 7) show Viṣṇu associated with Indra in the killing of Vṛtra, still an evil demon. In *Mbh.* 5.10, we have the two gods killing the demon by means of the *vajra*, covered by foam into which Viṣṇu had entered, obviously a throwback to the Namuci story. To follow the legend down a bit, we may note that in the Vulgate (no critical text being as yet available) Śānti-parvan of the *Mbh.* (1.2.279–82) Vṛtra appears as a very noble king, taught by no less than Uśanas, and still magnificent in defeat. Uśanas is a Bhārgava, a *vibhūti* of Kṛṣṇa in the *Gītā*, which shows why the killing of Vṛtra rankled, at least in the minds of one important group of Brāhmaṇa clans. There is no point in attempting here to trace the historical meaning of the event. I wish to prove only that the whole nexus is Brāhmaṇical, showing anti-Brahmin action on the part of Indra; of course, it is clear that the god who befriended Prahrāda or the one whose *vibhūti* Prahrāda happens to be is not a natural friend of Indra. The insertion of Viṣṇu, even though we distinguish the god from Nārāyaṇa, points merely to an early Brāhmaṇical revision of Aryan mythology, but in rather a hesitant manner, still admitting the hegemony of Indra.

The Bṛhaddevatā vii.53 leads us to the ultimate source. 'On earth he exterminated both the Kālakeyas and the race of Pulomā, the archers, and in heaven the notorious (*tān*) offspring of Prahlāda'. This follows the usual exploits of Indra shattering the nine nineties of the Dānavas and looting their treasures. But specifically, we are told that this is Indra Vaikuṇṭha, and the name itself guarantees not only an element of historicity but makes it plausible that Indra was the title of a succession of human chiefs. Vaikuṇṭha later becomes a title of Viṣṇu, just as Narottama and Puruṣottama are transferred to the same god from Buddha, and Puraṃdara from Indra to Śiva. The Bṛhaddevatā does us further service in referring the passage to *Ṛgveda* x.48–9. Indra Vaikuṇṭha, being puffed up with his own power, began to harass the gods, and was placated by the seer Saptagu, who praised him. Then Indra coming to his senses (*sa buddhvā cātmānam*) speaks the two hymns to his own prowess. This is the first traceable source of the god proclaiming his own might and 'knowing himself', hence of the principle *yan māṃ vijānīyāt*. But it is remarkable that absolutely nothing is said in the two *Ṛgvedic* hymns of the Prahlādas, the other two tribes, or any consciousness of sin. 'For me hath Tvāṣṭṛ forged the iron thunderbolt . . . Against the Guṅgus I made Atithigva strong . . . With deadly blows I smote Atka for Kavi's sake . . . As Śuṣṇa's slayer I brandished the dart of death . . . Smadibha, Tugra, and the Vetasus I gave as pray to Kutsa. I was a worthy King . . . I crushed Navavāstva of the lofty car . . .' There is killing in plenty, but of quite other people. The identification with a universal god has not yet begun, though there are elements which can be so taken later on: *ahaṃ saptahā Nahuṣo Nahuṣṭaraḥ* shows, with the legend that Nahuṣa was for a time occupant of Indra's throne, that Indra might claim to be the very substance of Nahuṣa in 'out-Nahuṣing' Nahuṣa. Finally 'I, gifted with great wisdom, spread the floods abroad: . . . I set within these cows the white milk which no god, not even Tvāṣṭṛ's self had there deposited . . .' seems to show that some of the divine attributes which could later be developed to mean the essence of all, as in the Nārāyaṇīya passage and the *Gītā*, also start with Indra and not only from the Puruṣasūkta hymn. The discrepancy between the Veda and the *Bṛd.* comment therefore becomes puzzling.

7. The Bṛhaddevatā vi.150–1 reports the killing of Triśiras Tvāṣṭra, and *RV*. x.8.9 supports this by *trīṇi śirṣā parā vark*. But *Bṛd*. vi.152 follows this up at once by saying that Indra was denounced for the sin '*taṃ vāg abhyavadad brāhmī brahmahāsi śatakrato*'. This is not to be translated, in my opinion, as usual by rendering *brāhmī vāc* as divine speech, but far more emphatically the voice of the followers of Brahmā. That is, the whole episode of Indra's killing is doubtless traditional (Śat. Brāh. i.6.3.2; but the embarrassing sin is shifted in i.2.3.2) and as reliable as anything in the *Ṛgveda* itself, but regarded as a sin, hence unquestionably

an extra-Vedic tradition of the Brahmins. This can be accounted for only by the hypothesis set out earlier, of Brahmin servitude to Aryan conquerors. In fact we can find plenty of explicit support for this.

The *Bṛd.* itself gives us such support in v.156–9; '. . . For he (Vasiṣṭha) once upon a time, by means of austerity saw Indra who was invisible to (other) seers. The Lord of Bay Steeds (Indra) then proclaimed to him shares in Soma. For this appears from the Brāhmaṇa *ṛṣayo va indram*. Vasiṣṭha and the Vasiṣṭhas thus (became) Brahmins in the office of Brahmin priests, most worthy of fees in all rites at sacrifices. Therefore, one should honour with fees all such descendants of Vasiṣṭha who may at any time even today be present at a sacrificial assembly, so says a sacred text of the Bhāllavins'. It is easily proved that we have a historical fact in the asserted priority of the Vasiṣṭhas, which is not only current in general tradition (Śat. Brāh. xii.6.1.41) but also shown by the story that Jamadagni later disputed their monopoly. Śaunaka, reputed author of the Bṛhaddevatā, is supposedly a Bhārgava, and would not have reported such a story unless it were generally accepted. That the Bhārgavas did not acknowledge Indra at first is also quite clear from the same work *Bṛd.* vi.117–19 '. . . With the triplet *ayam* (*RV*. viii.100.1–3) Nema, son of Bhṛgu, praised Indra without seeing him. And Indra then with a couplet (*RV*. viii.100.4, 5) "Here I am, behold me, seer." For Nema, being alone (*eka*) while praising (Indra) had also said 'There is no Indra'. Nothing could be more explicit. The Bhārgavas refused to acknowledge Indra till after the Vasiṣṭhas had gone over to that cult. We know that a vast amount of the later tradition is written up by Bhārgava redactors, and this accounts for their possession of hostile myths, actually faded history, which they wrote into the Aryan sacred documents, reconciling bitter fact with ancient pretensions. It is for this reason that Indra, with his clearly defined Vedic cult, his subordinations to Agni, and known harshness to Brahmins was not suitable as the object of faith. We can understand *Mbh.* 3.148.17, where Hanumān says of the *kṛta* age: *na sāma-yaju-ṛgvarṇāḥ kriyā nāsic ca mānavī/ abhidhyāya phalaṃ tatra dharmaḥ saṃnyāsa eva ca*. Such a statement in a Brāhmaṇical work must be taken seriously to indicate at least a traditional pre-Vedic golden age. For the renascence of an old sectarian cult, such as that of Nārāyaṇa must have been before the Mārkaṇḍeyasamāsyā was composed, a method of universalization was necessary which would permit identification with any really popular cult-object. This aim having been realized by means of the incarnation theory, it follows that the particular incarnation striven for, here Kṛṣṇa, must have had a large popular following.

Merely pointing out the oldest sources would have led us, besides the Puruṣasūkta, to the proclamation of Vāgāmbhṛṇī in *RV*. x.125. She declares herself the bearer of all the chief gods, the mover of all, filling earth and sky. Similarly Vāmadeva, perhaps speaking as Indra, in *RV*. iv.26 starts off by identifying himself with Manu, Sūrya, Kavi Uśanas, Kakṣīvān, Kutsa Arjuneya. The tone of the first sūkta is familiar to readers of the *Gītā*, while the first three of Vāmadeva's identifications occur in the tenth adhyāya of the same work. Thus the procedure goes back to the oldest Brāhmaṇical tradition. However, the intermediate steps are of far greater interest than the sources, for they show what was necessary before such universalization could effectively be accepted. As for the Brahmins themselves, their ambiguous role is shown by a glance at the position of Kavi Uśanas, whether the name represents just one or several different persons, and whether or not there is any basis for the comparison with Kai Kāos of Iranian legend. He is the Bhārgava author of *RV*. ix.47–9 and ix.75–9, patronized by Indra in *RV*. x.49; but also an unsuccessful herald of the Asuras against Agni for the gods, in Tait. Saṃ. ii.5.8; and the preceptor of the Dānavas by reason of his magic power of reviving the dead, according to the famous Kaca-Devayānī story (*Mbh*. 1.171.6). This means that opportunism is also an old Brahmin tradition. That the clan-groups disagreed among themselves would seem clear from *Brd*. iv.117, which reports that *RV*. iii.53.21–4 are specifically curses against the Vasiṣṭhas. The hymn itself could be chanted by Viśvāmitra only because of speech (*vāk sasarparī*), supplied to the fainting sage by the Jamadagni Bhṛguids. At the beginning, we find two theories of precarious welfare after death: performance of ritual and the cult of the dead by faithful descendants, and a store of personal merit. But this remarkable priesthood maintains and improves its position while propagating a much easier method of permanent salvation, faith in a personal god.

To recapitulate: the gradual raise to pre-eminence of a substratum in the tradition which is hostile to the general tone of Vedic legend plays a leading part in the syncretism. For the Vedas there are no *avatāras*; Rāma, son of Jamadagni, is merely a harmless sage, the traditional author of an innocuous hymn, *RV*. x.110; Nārāyaṇa is a human author of *RV*. x.90, in which however a rudimentary form of many claims made later by the god Nārāyaṇa can be seen, and it would be surprising if this were a mere coincidence—if Puruṣa Nārāyaṇa, the god Nārāyaṇa and the Puruṣasūkta hymn had only fortuitous connections. On the other hand, Indra's most difficult achievements appear later as transgressions against Brahmins. This submerged portion of the tradition must have had some historical foundation, and therefore been retained, painful and humiliating though it was, in Brāhmaṇical memory throughout the early period of Kṣatriya dominance.

NOTES

1. Psychoanalysts would call the whole scene symbolic of birth, the waters being uterine and the Nyagrodha branches the placenta.
2. For purposes of comparison, a rather free translation of *RV*. x.90 would run as follows: 'A thousand heads hath Puruṣa, a thousand eyes, a thousand feet; universally encompassing earth, he fills the ten-digit space (1). This Puruṣa is all that hath been and all that is to be; the Lord Ana (*īśāna*) of immortality which waxes greater still by food (2). All this is his greatness, yet far greater than this is Puruṣa. All creatures are one quarter of him, three quarters immortal life in heaven (3). With three quarters Puruṣa ascended, one quarter of him again was here. Thence he extended to every side over what eats and what eats not (4). From him Virāj was born; again Puruṣa from Virāj (was born). As soon as he was born he spread out, then (created) earth, thus (all creation) (5). When gods prepared the sacrifice with Puruṣa as their offering, its unction was spring, the holy gift was autumn; summer was the wood (6). They anointed as victim on the sacrificial grass Puruṣa the first-born. With him (as sacrificial beast), the deities and all Sādhyas and Ṛsis sacrificed (7). From that great all-consuming sacrifice the dripping fat was collected. He formed the creatures of the wind, and forest, and of the village (8). From that all-consuming sacrifice Ṛk and Sāma hymns were born. From it were incantations produced, the Yajus also was born of it (9). From it were horses born, and such like as have two rows of teeth; from it were generated kine, from it the goats and sheep were born (10). When they apportioned Puruṣa, how many (portions) did they prepare? What did they call his mouth, his arms? What do they call his thighs and feet? (11). The Brāhmaṇa was his mouth, of his (two) arms was the Rājanya made; his thighs (became) the Vaiśya, and from his feet the Śūdra was born (12). The moon was gendered from his mind, from his eye the sun had birth; Indra and Agni from his mouth were born, and Vāyu from his breath (13). From his navel came the middle region, the sky was fashioned from his head, earth from his feet, and from his ear the directions. Thus they formed the worlds (14). Seven encircling rods had he, thrice seven layers of fuel were prepared, when the gods offering sacrifice bound as their victim Puruṣa (15). Gods, sacrificing, sacrificed the victim. These were the earliest holy ordinances. The mighty one attained the height of heaven, there where the Sādhyas, gods of old, are dwelling.' A variant is found in *AV*. xix.6.
3. Draupadī's celebrated prayer to Kṛṣṇa when Duḥśāsana strips off her garments is merely a later insertion, after the critical 2, 61, 40, in the Sabhāparvan. The critical text just reports the miracle of duplication of the heroine's clothes, without any intervention by Kṛṣṇa, which proves a later Vaiṣṇava redaction of the epic.

4. In the Kimjavadekar edition (Bombay), not critical of course, the reference reads: *audbhijjo bhavitā kaścit senānī kāśyapo dvijah aśvamedhe kaliyuge punaḥ pratyāhariśyati* (*Hv.* 3.2.40), and seeing that the prophecy has been adopted in other details by *Mbh.* 3.186, 188 mostly from *Hv.* 3.3 and 3.4, there is good reason to take Kalki as later than Puśyamitra. Patañjali on Pāṇ. 3.1.26, *Puśyamitro yajate*; 3.2.123 *iha Puśyamitraṃ yājayāma iti*, supports the identification, when we recall that *senānī* is a Śuṅga title.
5. In my opinion, the bearded tricephalous old man of the famous Mohenjo-Daro seal, seated in a characteristic *yogī* pose, and surrounded by animals is actually four-headed, the fourth being turned away from the observer. If so, this must be Brahmā, depicted as Paśupati or Prajāpati, depending on whether we take the animals as mere beasts, or totems; probably the latter.

21

The Historical Krishna*

1. *The Legend: First Phase*

The Puranas inform us that Krishna's father was Vasudeva, mother Devaki, sister to a tyrant of Mathura named Kamsa. The people were the Andhaka-Vrishni branch of the Yadus. As Kamsa personally drove his sister in a chariot for the wedding procession, a prophetic voice from the skies warned him that the child of the union would cause his death. The newly-weds were strictly confined. Each successive child born of Devaki was killed by the wicked uncle. Vasudeva saved the eighth by taking the newborn infant across the river at night, to be fostered in a *gokula*, cattle-herders' commune. Krishna was raised as their own offspring by the pastoralist Nanda and his wife Yashoda.

Putana, sister or wet-nurse to Kamsa, tried to kill the child with her poisonous milk; Krishna took her breast and killed the demoness instead. The boy grew up to be unusually mischievous, but with early prowess. The five-headed *naga* Kaliya had so poisoned the water as to make a pool of the river unsafe for man and beast. Krishna dove into the pool, trampled down the cobra-demon, but spared his life. The *gokula* shifted from the riverside opposite Mathura to higher ground at Mount Govardhana for the rainy season. This annual pastoral 'booly' was marked by sacrifices to Indra. Krishna changed the custom, substituting the worship of mountain and of the cows. The raging rain-god showered his missiles upon the renegade herders; but the divine stripling easily lifted up the mountain on one finger as shelter for the *gokula* encampment to protect man and beast against the wrath of Indra.

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After crushing a few other demons, the fame of this powerful youth and of his even stronger brother Balarama spread to Mathura. Suspecting that this was indeed Devaki's child, Kamsa arranged a public contest where the brothers would be killed by trained fist-fighters. The pair entered Mathura as swaggering bullies. After they had smashed down the king's champions in the arena, Krishna dragged Kamsa off his throne to fulfil the dark prophecy. Kamsa's father-in-law, Jarasamdha of Magadha, advanced upon Mathura for revenge. The whole tribe fled to a safe distance, founding a new settlement at Dvaraka which thereafter became the seat of the Yadus.

2. *The Second Phase*

The Yadu hero had also begun to show his virility in other ways. As a herd boy, he had dallied with the *gopi* milkmaids. Then he married a surprising number of beautiful and semi-divine ladies: Rukmini, princess of the Bhojas; Jambavati, daughter of a 'Bear' king; 16,000 apsaras in human

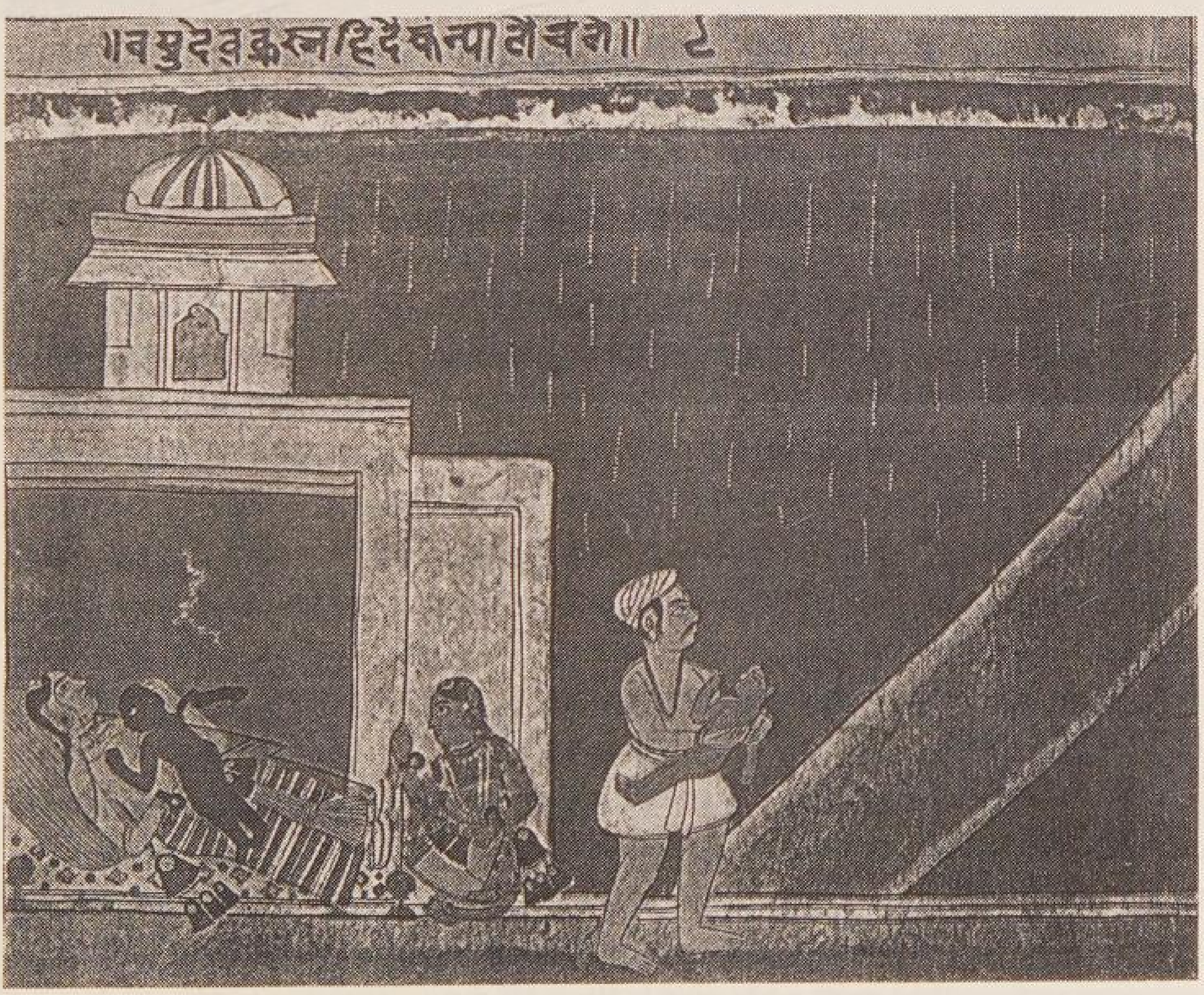


Fig. 1. Vasudeva exchanges the child Krishna for the baby girl.
Malwa School: AD 1650.

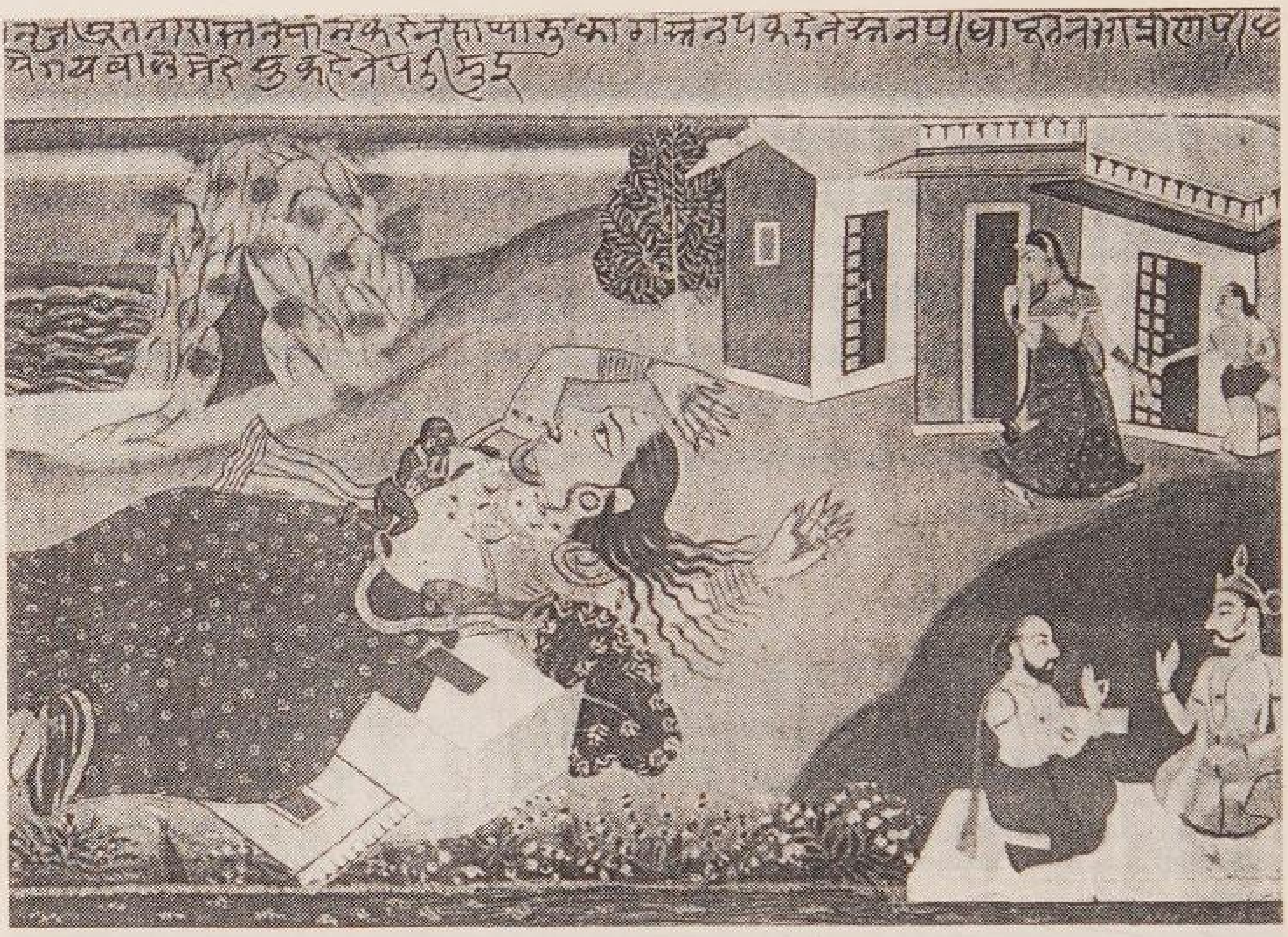


Fig. 2. Krishna takes Putana's breast.

form released from the bondage of the demon Narakasura. The progeny of 16,108 official unions amounted to 80,000 sons. Krishna was literally the father of his country. At about this time, the hero made friends with the five sons of Pandu, whom he aided in clearing by fire the primeval forest that then covered the site of Delhi. When Arjuna fell in love with Krishna's sister Subhadra, the brother advised him to abduct her. A long chase by the Yadus ended in friendship after a proper marriage. Then Krishna took Arjuna and the strongest Pandava Bhima to the Magadhan capital Rajgir. They desecrated the holy chaitya and watch-tower at the main gate of the city and stole into the town disguised as Brahmins. Bhima killed Jarasamdha after a long and desperate bare-handed duel. A little later, Krishna beheaded the insulting ruler of Chedi, Shishupala, at Yudhishthira's great consecration ceremony.

The *Mahabharata* war soon broke out between the sons of Pandu and their Kuru cousins. The Yadus fought as a contingent on the Kuru side; Balarama refused to take sides, while Krishna served Arjuna as a lowly charioteer. Just before the beginning of the battle, Arjuna laid down his weapons, revolted at the idea of killing his own kinsmen. Krishna then persuaded him in a long and famous discourse, the *Bhagavad-Gita*, to do his duty as a Kshatriya. During the course of the *Gita* recitation, the dark charioteer suddenly revealed himself as an all-god creator and devourer of all, the ultimate supreme principle of everything. Nevertheless, the advice Krishna gave at critical moments of the battle was in strange contrast to the high morality of the *Gita*. Every one of the invincible Kuru leaders was killed by unchivalrous and even treacherous methods. Krishna defended his advice merely on the grounds that victory could not have been won otherwise.

There was a miserable and humiliating aftermath. Thirty-six years after the great battle, the Yadus killed each other off to the last man in a drunken fight at Dvaraka which Krishna and Balarama were powerless to prevent. Balarama yielded up the ghost on the seashore, being greeted by a vast concourse of *nagas* who came from the ocean to receive unto themselves his *naga* soul; for, surprisingly enough, this strong, simple and fairminded brother was an incarnation of the great primeval Naga who bears this earth upon his head to raise it out to the sea.

Krishna was killed soon after in the forest by a wild hunter Jaras, whose arrow lodged in Krishna's heel. This Jaras was actually Krishna's step-brother, son of Vasudeva by another wife. The widowed Yadu women were abducted on their way to Delhi by Abhira tribesmen. Arjuna, who guarded the convoy, found himself powerless even to string his mighty bow.

3. *Time and Place*

The first clearly datable mention of Krishna and his cult derives, as one would expect, from foreign records. Heliodoros, ambassador of the Taxilan Indo-Greek king Antialkidas, dedicated a pillar at Bhilsa in the reign of the Shunga monarch Bhagabhadra. The date should be about 140 BC. The Greek calls himself a *Bhagavata*, which at that time normally indicated a follower of the Buddha. Heliodoros makes it clear that his dedication is to the 'god of gods', son of Vasudeva. So, there was a strong Krishna cult, not necessarily in modern *bhakti* form, as early as the second century BC; even foreigners could join it. Alexander's companions had earlier reported that the major worship over the Punjab plains in 327 BC was of the Indian Herakles, while the older god Dionysos had been pushed back to the hills. This Herakles cult was centred at 'Mathura of the Surasenoi'. The Indian Herakles was Krishna beyond doubt. Krishna means 'black' and Hercules was also burnt black by exposure to the sun. Herakles was stronger than the mortals among whom he

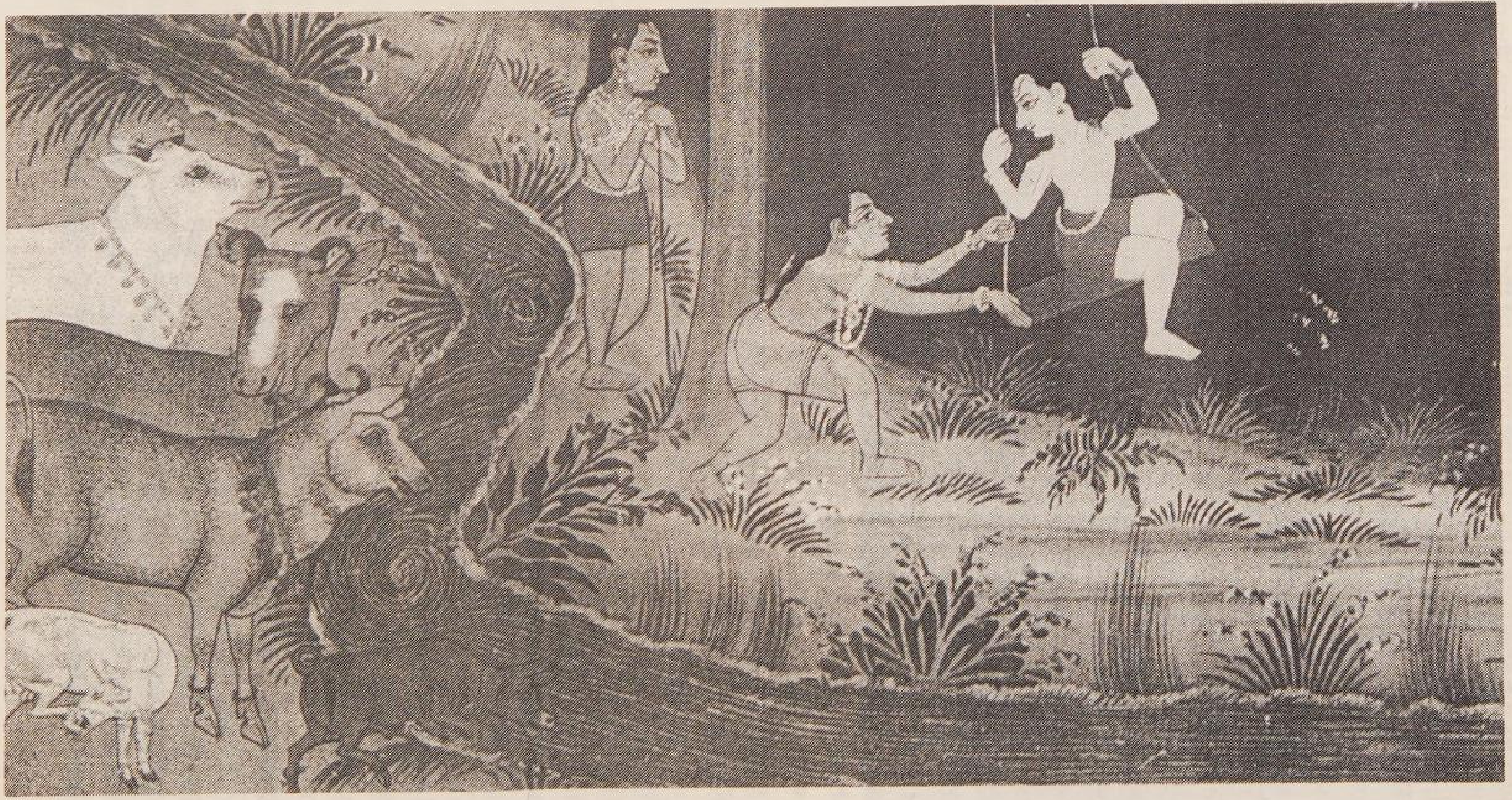


Fig. 3. Krishna with Balarama and the cowherds. Mewar School: Early eighteenth century.

performed his feats. He too violated or wedded several nymphs, and his status, like that of Krishna, was initially of an ancestral demi-god.

One more detail of the legend can be explained. The carrying off of Subhadra and the disgraceful Abhira episode at the end merely represent marriage by bride-capture, known in many parts of the world, e.g. the rape of the Sabines. The Abhiras were a historical tribe, of pastoral origin, who left the modern Ahir caste. The custom of bride-capture may have been common to them and the Yadus or the people of the *gokula*. One of Nanda's ancestors was named Abhira-bhanu.

The date for the Krishna legend can be moved back a little. The dark god's characteristic weapon is the *chakra*, a sharp wheel-discus that could be thrown to behead an enemy like Shishupala. The weapon is not Vedic and had gone out of use well before the Buddha. But a hero is shown throwing it from a two-horse chariot in a cave-drawing in Mirzapur district. Taking into account the heavily forested state of the country, the date could reasonably be put at about 800 BC, and not before 1,000 BC. As the cave is in Magadhan territory, we may have here a raid which contributed to the much later myth of Jarasamdha's killing.

On the other hand, Dvaraka of the original legend was not on the sea, nor in Saurashtra. To go from Mathura to modern Dvaraka means crossing a desert where the herds would be killed off, and probably the human beings too. The *Mahabharata* states emphatically, more than once, that Dvaraka was to the west of Mathura. There are places like Darvaz in Afghanistan which bear much the same name as Dvaraka—'the many-gated'. The seaside Dvaraka is a later invention, like the tracing of medieval Yadav and Jadhav ancestry to the extinct Yadus.

4. *The Historical Achievement*

Consider now the situation in the Delhi-Mathura-Meerut triangle as it must have been about 800 BC. To the west lie the wide plains of the Punjab, then occupied by many patriarchal Aryan tribes who lived on and off their cattle, with little agriculture. These Aryans fought incessantly among themselves and made complicated large-scale fire-sacrifices to Indra and other Vedic gods, where many cattle and other animals were killed. To the east stretched the limitless, dense Gangetic forest, barely penetrated for the first time by a few daring pioneers who had gone down the river and along the Nepal foothills to establish a handful of tiny settlements. Several different kinds of people met in conflict in Krishna's territory: pastoral Vedic Aryan tribes, food-gathering aborigines generically labelled Nagas, and the first mixed groups of agriculturists who

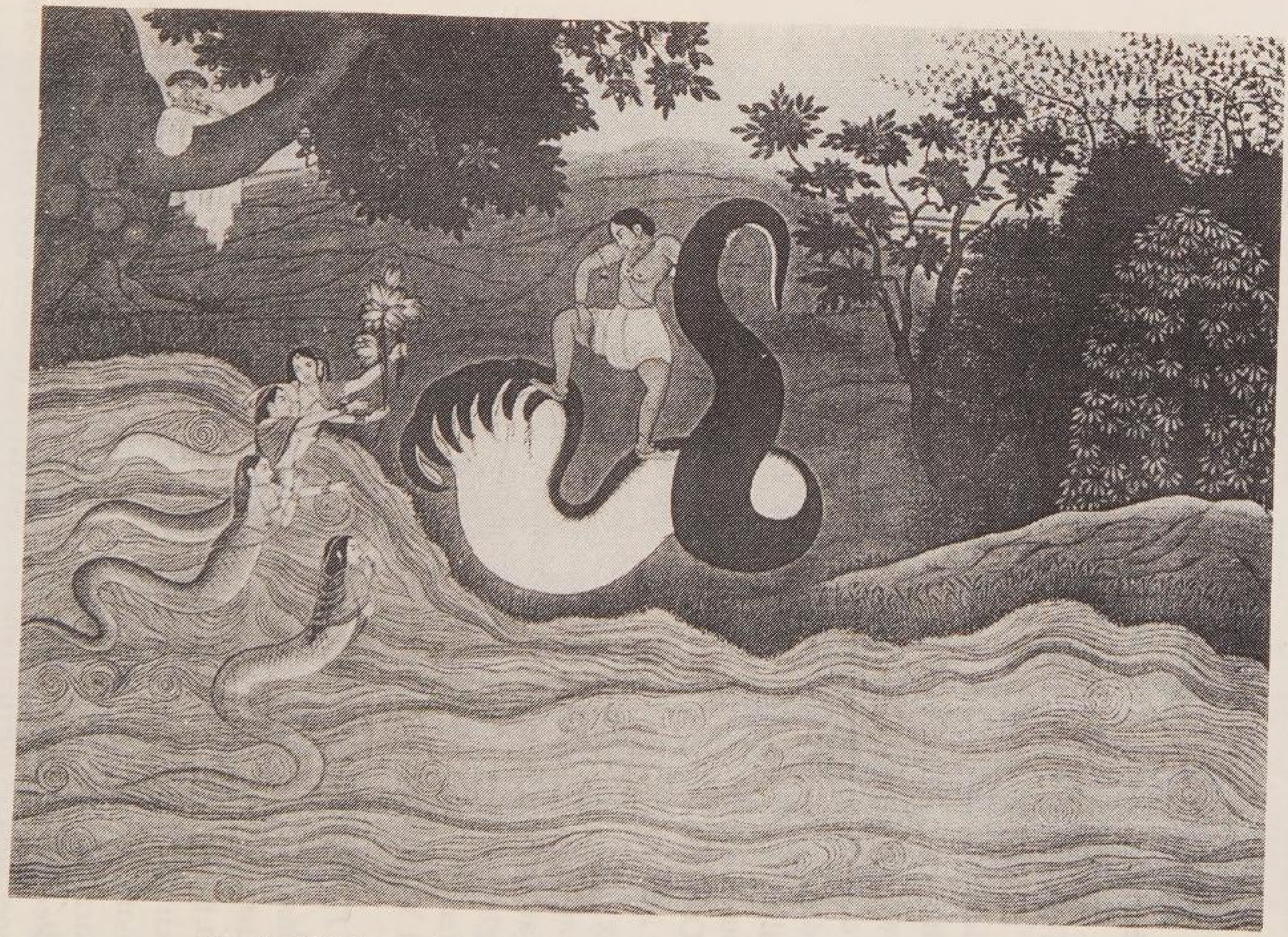


Fig. 4. Krishna subduing Kaliya—*Bhagavata Purana*, Guler School.

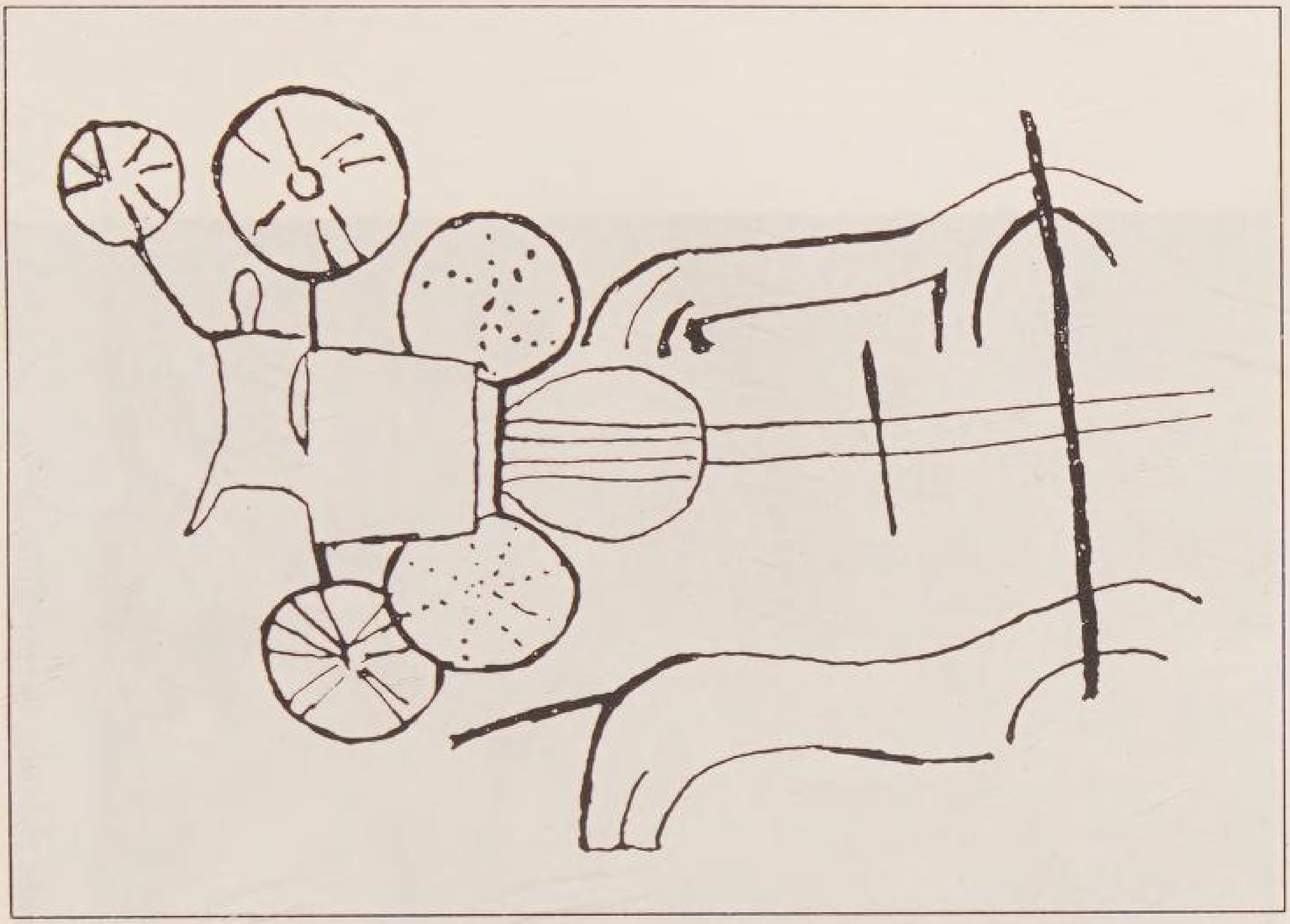


Fig. 5. Discus-throwing charioteer in a Mirzapur cave.

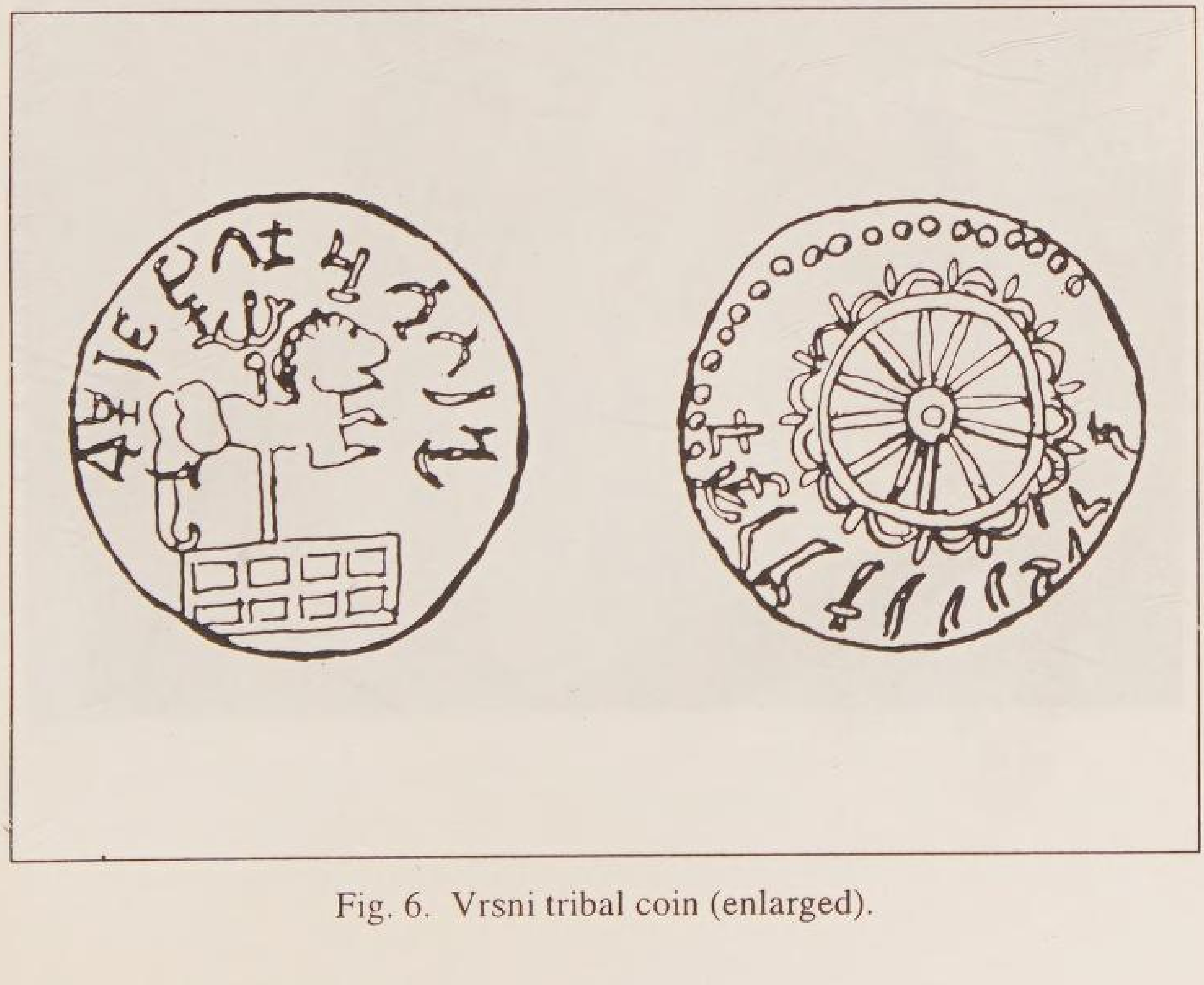


Fig. 6. Vrsni tribal coin (enlarged).

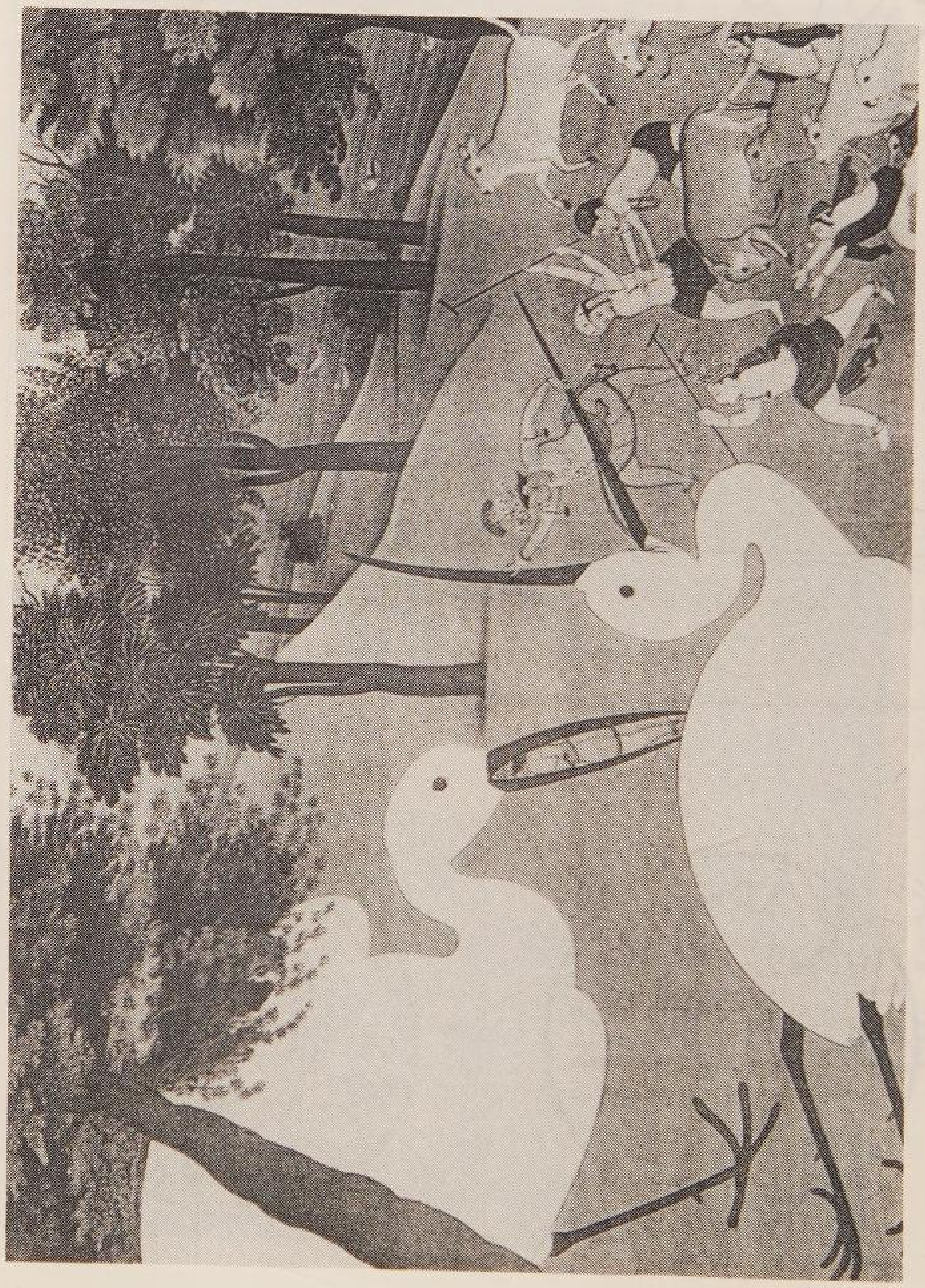


Fig. 7. Krishna slaying Bakasura—*Bhagavata Purana*, Guler School.

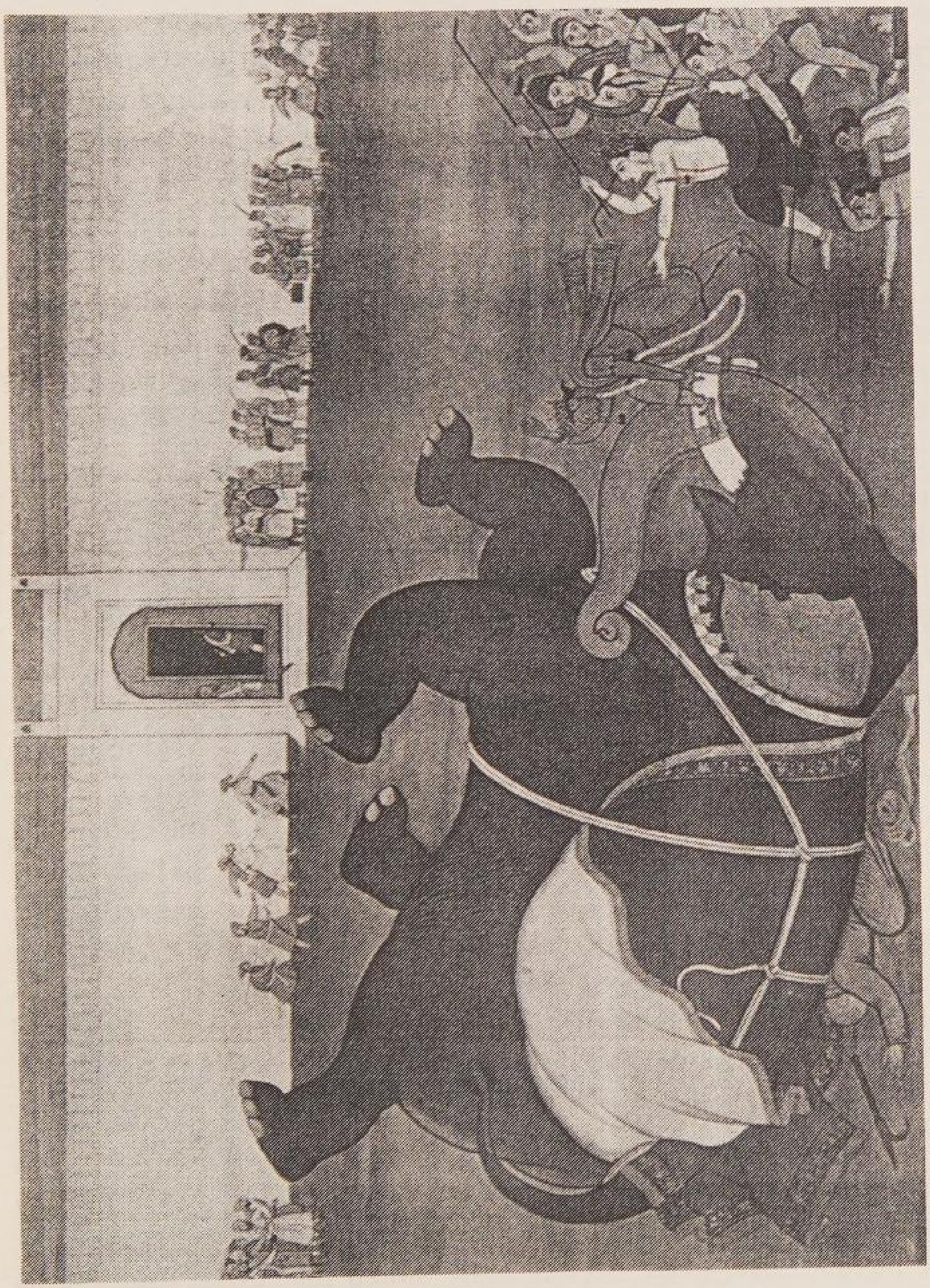


Fig. 8. Krishna killing the rogue elephant—*Bhagavata Purana*, Guler School.

had cleared a little of the marginal forest by fire. Iron was scarce, bronze too costly for agricultural tools. Nevertheless, the stage was set for a real food-producing society—if only the various tribes could stop fighting and combine against natural obstacles such as the uncleared primeval forest.

Putana was a mother-goddess. Her name applied to a part of the Mathura district even in historical times. The 'killing' was an act of violence by pastoralists against some matriarchal cult and its people. The Kamsa story is easily explained. In some tribes developed out of the matriarchal stage (which is normal to food-gatherers) the chief's heir is not his own son but his sister's son. Moreover, the successor to chieftainship had often to sacrifice his predecessor. This shows why Kamsa had to be killed publicly. Krishna's own strange death furnishes another example of primitive sacrifice of the chief by this surrogate 'brother'.

The marriages are a step forward from conflict to unity. Patriarchal and matriarchal cults could fuse because of such marriage, and the two hostile sets of people combine in worship of common gods. Krishna's supreme love Radha finds no place in either phase of his myth, because she was an eastern mother-goddess. The Krishna cult had to spread as far as Bengal before it became necessary to assimilate her cult. Krishna is now married with great ceremony every year to the sacred basil (*tulasi*) plant. The holy plant is also called *vrinda* and the most sacred spot near Mathura is the Vrindavana. The name literally signifies 'grove of the group-goddess'. Krishna had to marry Vrinda to gain the right of occupation for his people, here the *gokula* herders. The annual repetition of the ceremony indicates that at one time the husband of the goddess (i.e. of her human representative), had to be sacrificed and a new wedding consummated every year. The special pedestals upon which the *tulasi* is normally planted in India are actually horned sacrificial altars, found in many other countries as well. So far, then, we have transition from prehistory to history. The various feats were performed by many different heroes whose myths have coalesced to form that of Krishna.

5. *Transition to Agriculture*

The conflict with Indra is very significant. It is clearly a change from Vedic pastoral sacrifices to cults more suited for agriculturists. The Dionysos of the Greek account is in fact Vedic Indra. Dionysos is the god of wine, while Indra's special predilection of the heady *soma* drink runs right through the *Ṛgveda*. That Krishna had driven Indra's cult clear out

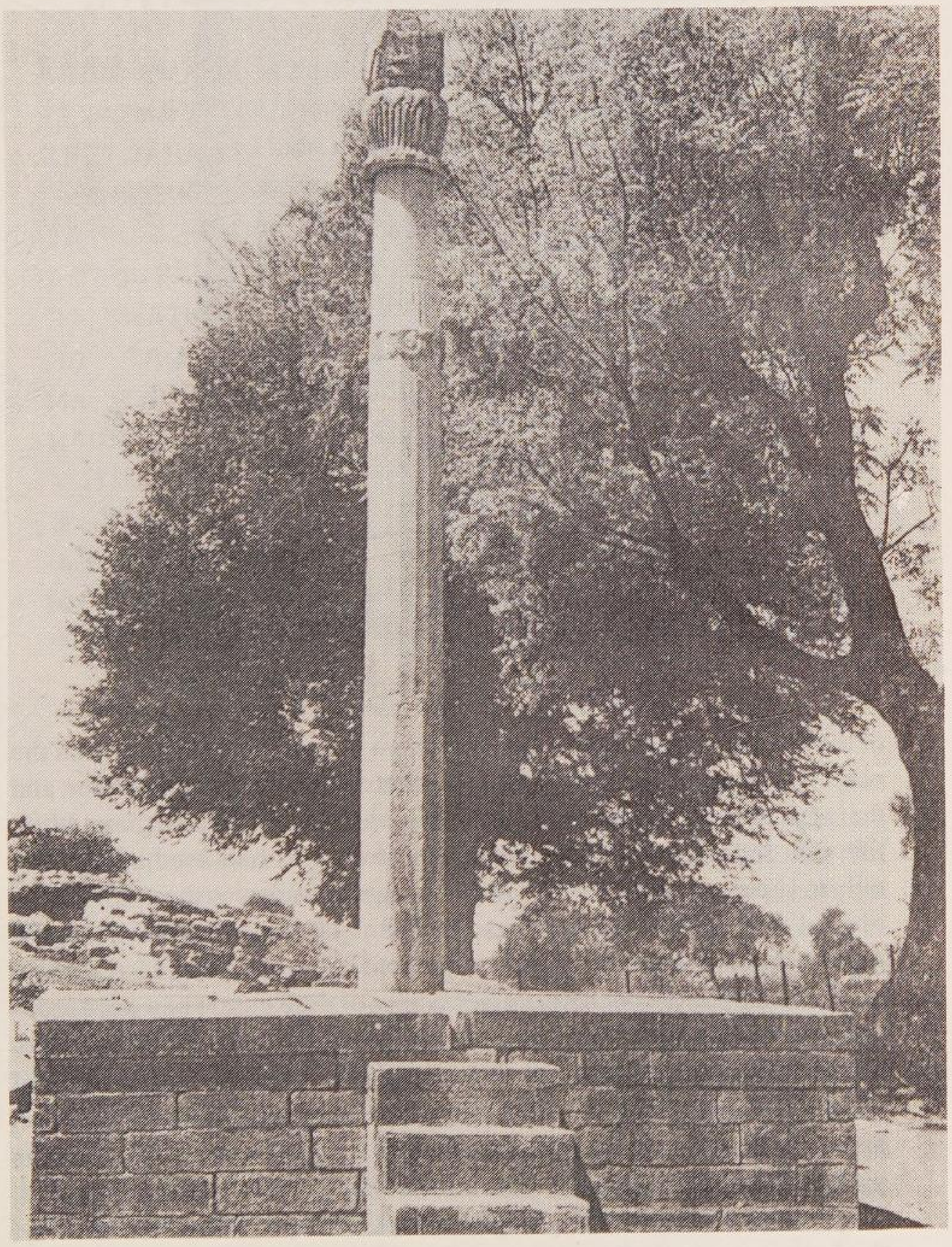
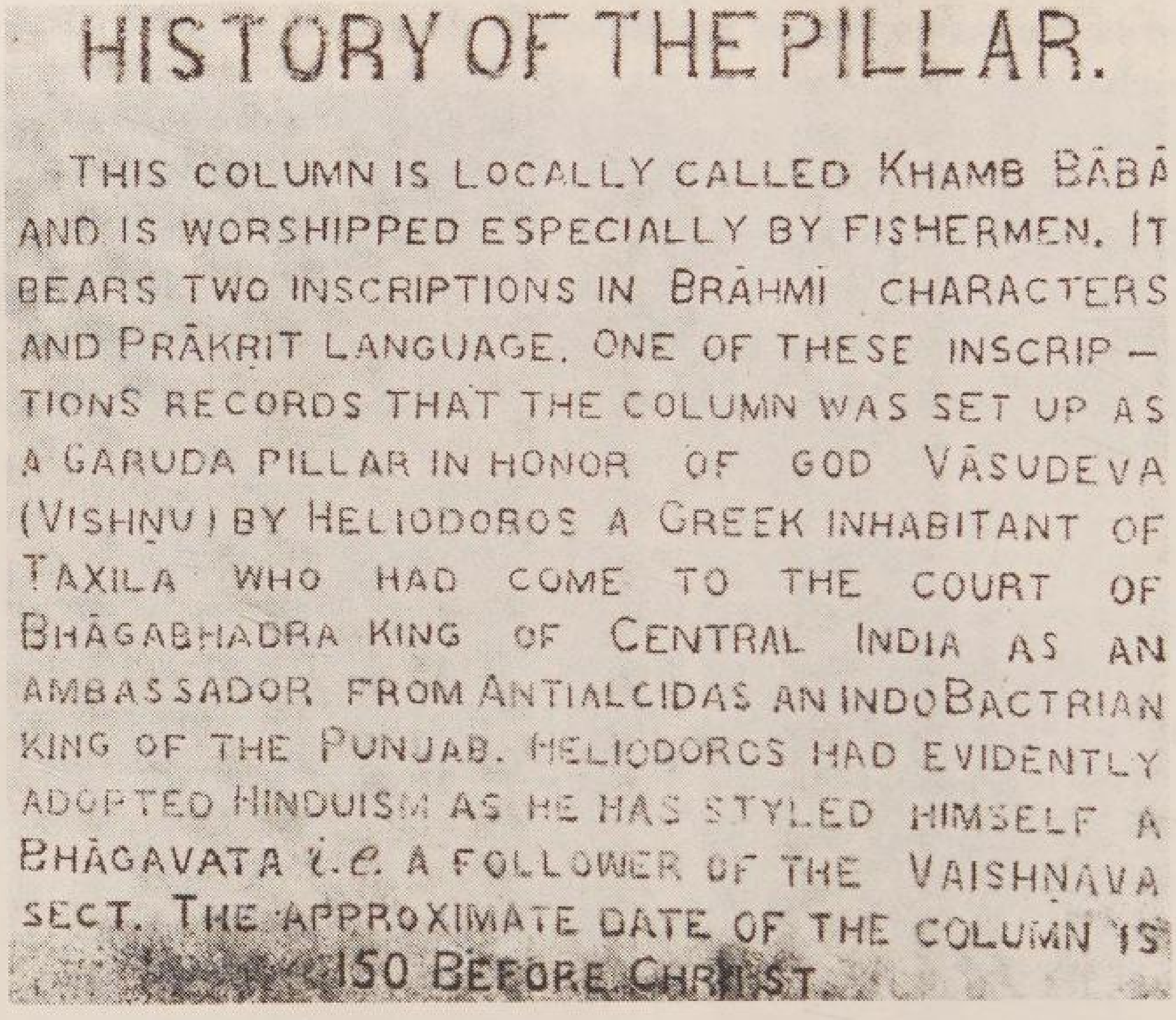


Fig. 9. The Heliodoros Pillar at Bhilsa near Sanchi. Set up 150 years before Christ by a Hellenic ambassador to the court of the King of Vidisa, this stone column is an early witness to the spread of the Bhagavata cult in India.



HISTORY OF THE PILLAR.

THIS COLUMN IS LOCALLY CALLED KHAMB BĀBĀ AND IS WORSHIPPED ESPECIALLY BY FISHERMEN. IT BEARS TWO INSCRIPTIONS IN BRĀHMI CHARACTERS AND PRĀKRIT LANGUAGE. ONE OF THESE INSCRIPTIONS RECORDS THAT THE COLUMN WAS SET UP AS A GARUDA PILLAR IN HONOR OF GOD VĀSUDEVA (VISHNU) BY HELIODOROS A GREEK INHABITANT OF TAXILA WHO HAD COME TO THE COURT OF BHĀGABHADRA KING OF CENTRAL INDIA AS AN AMBASSADOR FROM ANTIALCIDAS AN INDOBACTRIAN KING OF THE PUNJAB. HELIODOROS HAD EVIDENTLY ADOPTED HINDUISM AS HE HAS STYLED HIMSELF A BHĀGAVATA i.e. A FOLLOWER OF THE VAISHNAVA SECT. THE APPROXIMATE DATE OF THE COLUMN IS 150 BEFORE CHRIST.

Fig. 10. Details of the Heliodoros Pillar.

of the Punjab plains is in fact of the utmost importance. It means that the older Aryan practices had become obsolete by the time of Alexander, and that agriculture with its newer forms of worship had replaced the pastoral life with Indra's sacrifices. Earlier Vedic Aryans had used agriculture only to supplement cattle-breeding; now agriculture was the main source of food, and cattle-breeding the supplement. Cattle sacrifices on a large scale would have made agriculture impossibly uneconomic.

There remain the peaceful *naga* savages of the forest. They were food-gatherers, and had to be brought to food-production peacefully, for they could always retreat into the forest when attacked. The trampling of Kaliya was an act of aggression, of occupation by force. The assimilation here was brought about by Balarama, made into an incarnation of the primeval *naga*. Balarama is also called Samkarshana, the ploughman; his peculiar attribute is the plough, and not a weapon of war. To this day, the Indian peasant's favourite guardian of the fields (*kshetrapala*) is the sacred cobra—who becomes also Vishnu's bed and Shiva's garland.

The great war-epic, *Mahabharata*, gives Krishna's ancestry only in a

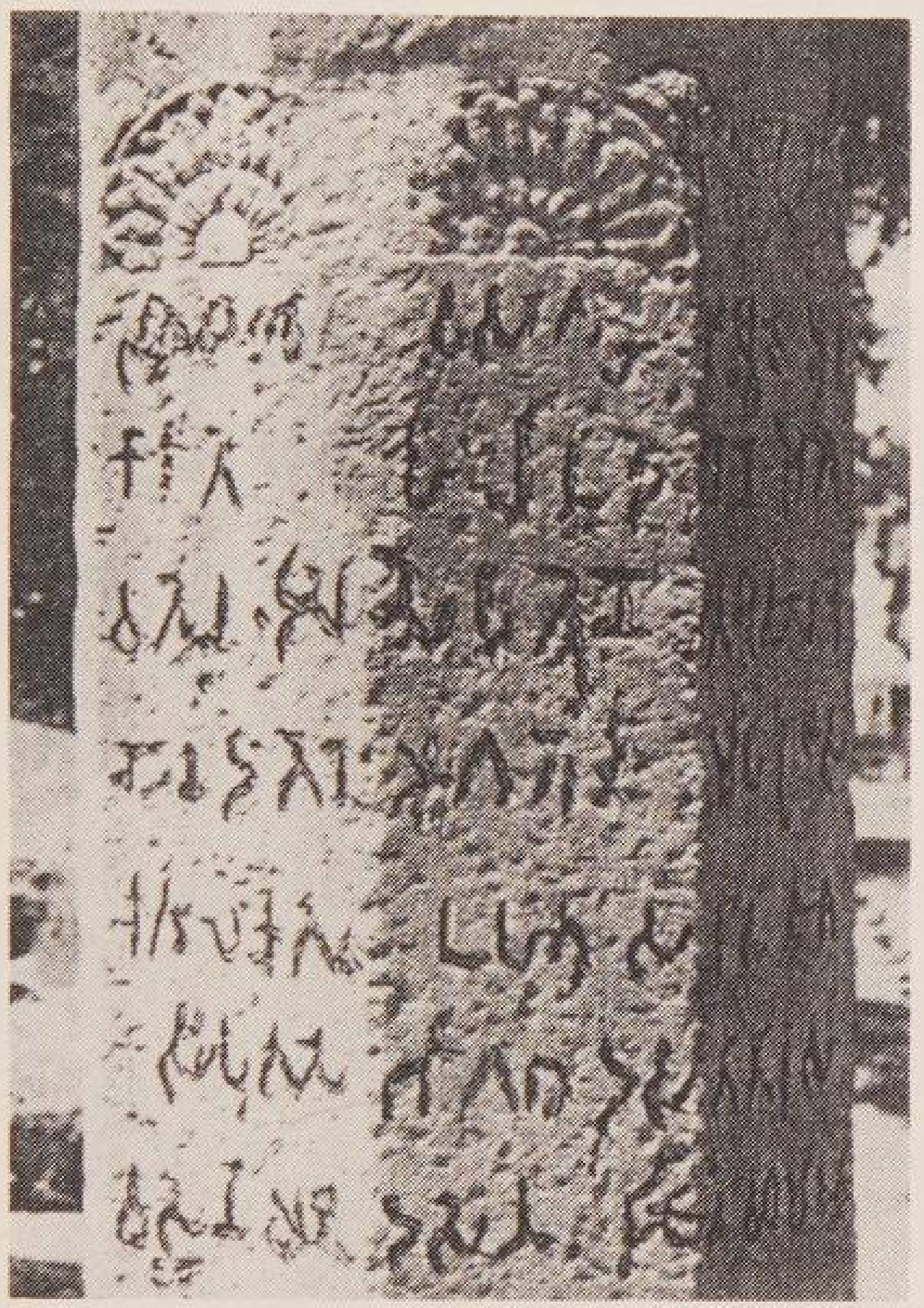


Fig. 11. Details of the Heliodoros Pillar.

late addition, the *Harivamsha* appendix. This book is not an integral part of the epic. However, the Naga genealogies occur at the very beginning of the epic proper. Look closely at the extant *Mahabharata* and you find that it is not a story of the great war as such. It is an account of how the Nagas were saved from Janamejaya's sacrificial fire by the brilliance of a priest Astika. This young Brahmin was the son of a Naga mother—yet counted as a Brahmin against all modern caste rules. Janamejaya's chief priest had similarly a Brahmin father and 'snake' mother. The assimilation of the Nagas was already begun. The *Bhagavadgita* was put into the mouth of Krishna only because he had by then a powerful following among the food-producers, who worshipped him for various reasons: as the first to abolish fire-sacrifices of cattle to Indra, the husband of the local mother-goddess, or the ancestral Yadu father-god.

Krishna, then, is not a single historical figure, but compounded of many semi-legendary heroes who helped in the formation of a new food-producing society. The work was done from 800 BC onwards. When Heliodoros dedicated his pillar, Balarama and other Yadu heroes still re-

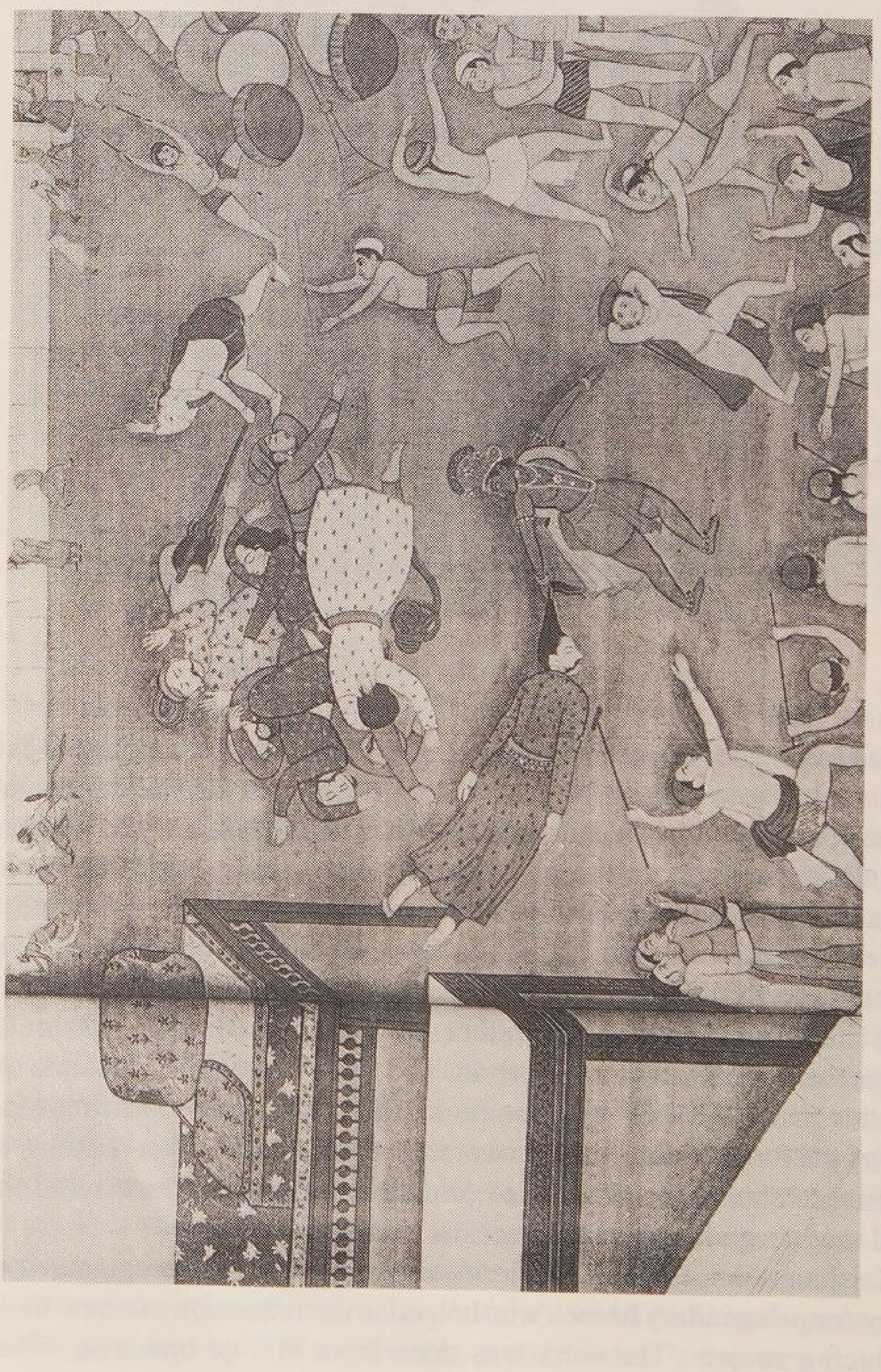


Fig. 12. Krishna is about to kill Kamsa—*Bhagavata Purana*, Guler School.

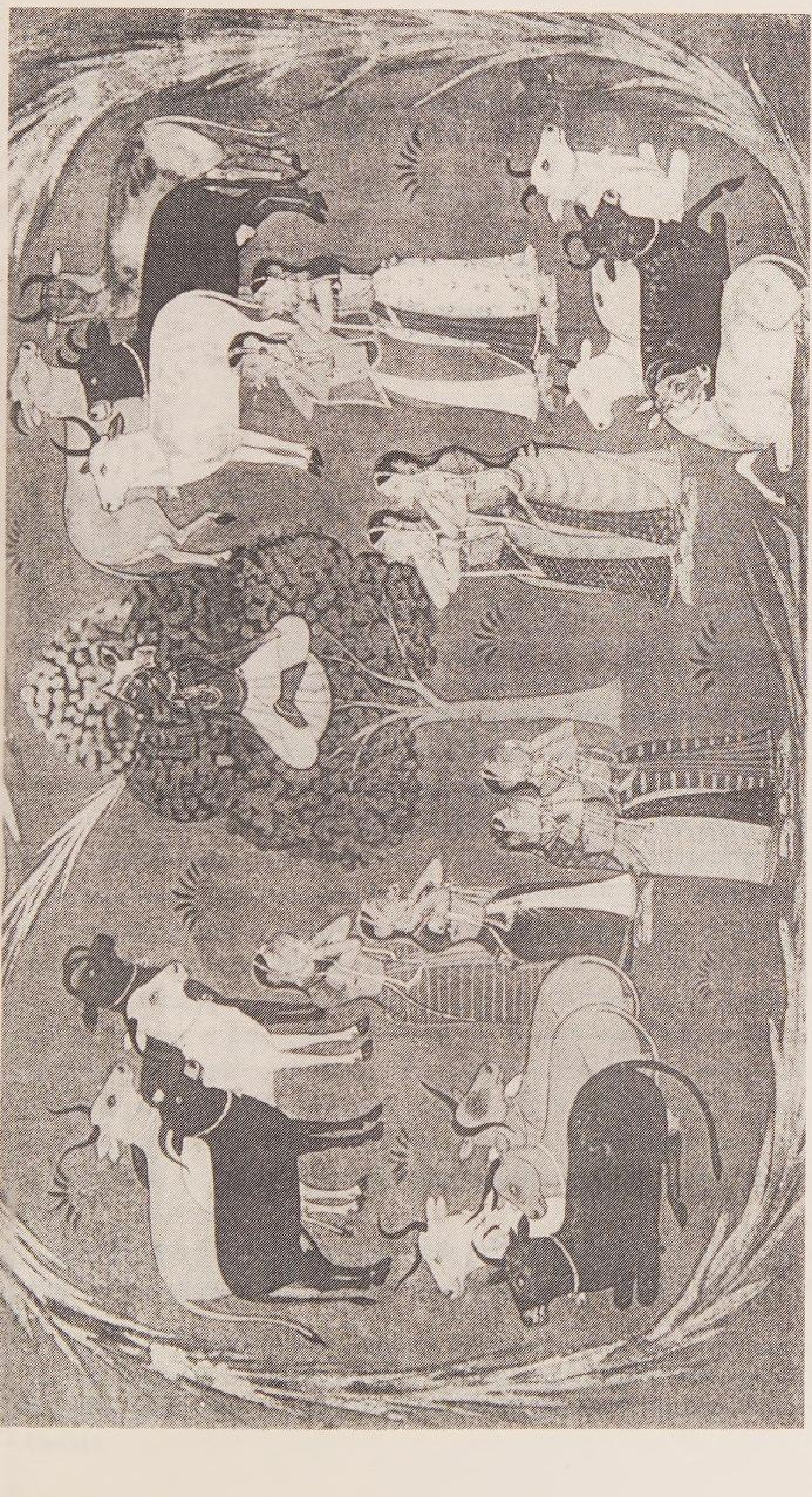


Fig. 13. Krishna swallowing the forest fire. Mewar School: AD 1700.

ceived equal honour with Krishna in Shunga sculptures. But by the fourth century AD the *Gita* had been composed and Krishna rose to new heights as the fountain-head of religious philosophy, inspiration to leading Indian thinkers from Shamkara to Mahatma Gandhi.

22

The Study of Ancient Indian Tradition*

1. *General Principles*

The principal aim of history, as written hitherto, has been the presentation of great events in a chronological sequence. However, the relative importance of events rarely appears the same to people of another time, place, civilization, or class bias, so that a mere chronicle does not suffice. The course of social development, the inner causes which ultimately manifest themselves in the striking events, the driving forces which underlie great movements, have to be made clear before any work can be dignified by the name of serious history. Yet this type of analysis is not always welcome to some historiographers. They, or the people who really condition their version of history, are unwilling to face the inevitable consequences of this procedure. For the implication is necessarily that all history can be so analyzed, hence current events; but if so, it follows that the course of events can be influenced by deliberate action, that history has hereafter to be consciously made by those that live it, not merely set down after a safe interval of time by the professional historian. This is clearly dangerous to those who would suffer by the change, usually those in power. Thus such historical writing is labelled subversive. History then remains a means of escape, a romantic pastime, a profession, or a method of inducing submissiveness; it cannot become a scientific pursuit.

My purpose here is not to analyse any present trends, but to set down certain completely proved basic postulates, and then to apply them to a

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**Indica: The Indian Historical Research Institute Silver Jubilee Commemorative Volume*, Bombay, St Xaviers College, 1953. Edited by Dr Radhakumud Mukherji, Prof. Md. Habib, Ramachandra Dikshitar, HD Sankalia, Dr Bhaskar Saletore, J.M. Unvala.

few small problems of ancient Indian tradition. This is necessary, for no other approach will do. Ancient India has no chronology at all even remotely comparable to that of Egypt or Sumeria. Even the major episodes are themselves not known with any certainty, let alone their dates. Yet India has a history in the truest sense of the word, though it cannot be extracted without considerable difficulty and mastery of diverse techniques.

The main statement is that mankind makes its own history by its efforts to live. The quest of food, shelter, clothing and other necessities of life is carried on by means of implements, tools (including weapons), the actual instruments of production. In using those tools, however, man does not labour alone. Production is a social process. Human beings have for millennia entered into social relationship with each other (independently of their individual wills, being usually born into a particular form of society) such as property rights, which we call the relations of production. The essential fact here is that the social superstructure, meaning thereby law, religion, philosophy, economic and political system, as well as the system of class-division underlying them, must correspond in *substance* to the means of production without their form being uniquely determined thereby, just as men can grasp and express the same reality without using the same language or symbolism. Production as a whole cannot remain for very long at any one level. In cutting down forests, planting grain, taming cattle, man changes his environment and therefore himself; he discovers new needs which did not exist before, makes new efforts to satisfy them. Thus the relations of production must also change. These changes are also independent of the individual human will; there is a constant struggle between existing and emergent forms, not always ending in the victory of the new. If the innovation conquers, new productive forces are generally released or at least stimulated; if defeated, the productive level generally goes down, decay setting in. This *defeat is never possible for human society as whole*, but it can occur in a sufficiently restricted portion; here, change of quantity does lead to change of quality—the history of a nation is not merely the history of a village multiplied by the total number of villages. The successive shifts in relations of production are what is generally called history, which obviously cannot be studied scientifically without considering the means of production as well. For societies like the ancient Indian, the change may be so slow as to possess no explosive or critical events (revolutions) to mark a transition; often the expression of change survives only as change of religion.

In effect, this 'static' form of society implies that the productive basis did not change radically from a rather primitive level.

As regards the actual tools of production, archaeology furnishes the most reliable guide. For the pre-literate period, there is no other source of information; but it is not generally recognised that even written records gain their full meaning only if material objects to which they refer can be examined. For the recent past, such objects are plentiful; what is missing in India is the record, so that most of us have no documents at all even from our great-grandparents! In Greece and Rome only the careful study of archaeological finds gave life to literary tradition. For example, without the two military columns of Trajan and Marcus Aurelius, Caesar, Livy and Polybius would be almost meaningless. The graves of Spartans who fell at Thermopylae have been found. So much of Pausanias's description of Greece has been verified by digging that the rest may be taken as reliable. Similarly, the archaeology of Palestine is now sufficiently advanced to enable Biblical myth to be separated from reality. Mesopotamian glyptic is a valuable supplement to cuneiform records. India has still to argue about the reality of the Kṛṣṇa of the *Bhagavadgītā*. No one has so far been able to say that some particular tools (whether stone or metal), some definite pottery types belong to the period of the character known later as Bhagavān Śrī Kṛṣṇa; or that such and such a stratum at Taxila represents the age of Parīkṣit; in fact, no one seems even to have tried such excavation seriously. Thus the interpretation of our oldest records is often a wrangle of pure conjecture between philologists, with theological overtones.

Archaeology does allow a broad chronological sequence to be established. There is no long occupation of any site without abrupt changes which are shown by clearly defined strata in the deposit. The excavator must go down to the 'natural', to the virgin soil which underlies all the debris left by men; then the characteristics, particularly pottery techniques, shapes, and designs of each stratum must be worked out; finally, the findings of many such excavations have not only to be collated with each other, but also with recorded tradition. In pre-literate periods, and with scattered excavation, we have some technical difficulties. The first is that only certain materials survive; stone, brick, perhaps metals (in dry soil) being far longer preserved than woodwork, textiles, leather, grain. Narrowing the scope of the excavation leads to isolation of the results, and unsupported conjectures. Ornaments, decorative motifs, local idols, cults and art forms then absorb all the critic's energy, with no attention being paid to the problem of whether we have a dead end or something on the main line of development. Far greater than these technical difficulties, however, is that of determining the *relations* of production from the implements and other relics. Here the study of primitive tribes which still survive in outlying portions of the world helps a good deal. It is quite true that stone arrowheads of the same form may be produced by people belonging to different cultures, for the technique of manufacture is a material process which a modern scientist (or forger) can repeat with identical results, whereas the ideas of the makers can differ widely. Actually these ideas by themselves (including the class-structure they assume as 'natural') are of no importance except as they hindered man's enhanced control over his environment (superstition) or promoted it (science). Primitive man set immense store by ritual whose forms are not easily deduced from his tools or household gear. If goods accompany his bones (as often happens) we can say something about his mental processes. Here the literary record helps a little, particularly in India, where the most primitive ideologies have been steadily absorbed by expanding Brāhminism. The necessary caution here is that the existence of writing implies that a higher stage of society has come into being, that a well-developed class structure exists, that the scribe—whether he is conscious of it or not—invariably writes with his own class bias. In liturgical texts, the forms and words are often carefully preserved even when substance and meaning have changed; sometimes even the language of the ritual is a dead language. So it is again necessary to separate the recorded tradition into its strata, a much harder and more ambiguous task than for the archaeologist. Similarly, in carrying over parallel observations by anthropologists on surviving primitive societies, it is necessary to remember that the very survival marks these tribes as in some respect aberrant, atrophied remnants of the past or denotes readjustment to new conditions. That they could stagnate so long often proves overdeveloped superstitious regulations which hinder all further change, by discouraging innovations in the process of production. The historian who takes ritual or the earliest written records at their face value is merely dodging his main task.

2. *Pargiter's Theory*

A necessary condition for the reliability of literary tradition, when it comes to collating legends with excavations, is uninterrupted contact of the people with the site. This gives the Old Testament its value, but deprives the Purāṇas of any such claim.

Many of us have been stimulated by F.E. Pargiter's *Ancient Indian*

Historical Tradition (London 1922), referred to by page number as *P*. He took the Purāṇic tradition as much older than the *Vedas*, maintaining that the real Indian civilization spread outward from the Gangetic basin; that the Āryans and their culture, as represented by the Veda, are late intrusions. This composite thesis is untenable in several particulars: It is not then clear why the 'later' records namely the Vedic, should be written in an uncontestably more archaic form of the same language. Several characters of the later *Ṛgvedic* layer appear so inextricably woven into the Purāṇas that Pargiter resorted to quite arbitrary separation into myth and historical record, without the slightest archaeological evidence. The real difficulty, from our general principles of the first section, is materialistic. The fertile alluvium and heavy rainfall of the Gangetic basin make it quite certain that there existed a dense forest over the entire region, down to the early Buddhist period when its existence is proved by the literature. The river settlements like Kosambi and Banaras are negligible compared to those in the foothills, till trade and trade routes develop—not much earlier than the time of the Buddha. The reason is that neolithic man cannot clear heavy forests to yield farmland; the operation has to await the age of metals. The U.P. soil has hardly any stone, let alone metals. Great wars, such as that reported by the *Mahābhārata*, are a concomitant of the later bronze age. A sufficient production of metals certainly did not exist in the Gangetic basin in 3101 BC, the traditional date of the great Bhāratan war; it could hardly have been possible for that region even in 1000–800 BC, to which time Pargiter proposes to bring down the conflict. The clearing and settlement of U.P. proper was not possible before the period of the Śaiśunāgas and Nandas; only by the time of the Mauryans had it advanced sufficiently for universal conquest.

Nevertheless, it cannot be denied that some of the Purāṇic stories, such as the flood legends, which appear only in later Vedic works like the *Śatapatha Brāhmaṇa*, are very old, older than *Ṛgvedic* myths. This must be accounted for. How does the 'Semitic' flood-story suddenly appear so late in a region so far removed from any Semites, with an uncontested claim to antiquity? The explanation I have proposed elsewhere is that the Brāhmin caste is formed from the priesthood of the conquered pre-Āryan as well as of the conquering Āryans, being a class phenomenon after the conquest. The traditions, therefore, are mixed.

These traditions cannot possibly be relied upon for serious history. Only, some of Pargiter's *component* hypotheses could be reformulated and supported by evidence. That some elements of Brāhminism are pre-Āryan (*P*. 306), that some Purāṇic kings may be pre-Vedic (*P*. 42), and so on. But just where the historical event, if any, associated with a given legend took place is quite another question. The condition of uninterrupted contact has not been satisfied. All evidence points, on the contrary, to steady displacement of place-names, first to the east and then southwards. Names like Sarasvatī, Candrabhāgā, Irāvatī have travelled far through the centuries, from one river to another. Kosala at the time of the Purāṇas means a southern region near the Mahanadi; correspondingly there appear southern Ikṣvākus who could hardly have had any demonstrable connection—except in their own imagination or that of their hired priests—with those of Ayodhyā. There is then every likelihood of old legends being revived and reshaped for new kings, much as the Arthurian and Carolingian cycles took on new form for Norman feudal lords and Italian merchant princes of the Renaissance.

Finally, there is—in spite of his own denials—the Euhemerism of Pargiter to be discounted. He takes Kuṇḍin as a particular Vasiṣṭha (*P*. 216); yet the legend of Vasiṣṭha's birth (*RV*. vii.33) shows how descent from a mother-goddess has been disguised as birth from a vessel. Kuṇḍin means again one born from a vessel, or pond, *kuṇḍa*. The Brāhmin general Droṇa of the *Mbh*. was also similarly born. This can hardly be an 'Āryan' myth. In fact, Droṇa's son, the immortal Aśvatthāman, (the Spatembas of Megasthenes) has a jewel in his forehead, the emblem of a Nāga; sovereignty passes to Yudhiṣṭhira only when this jewel is torn out, so that the original tale is a pre-Āryan Nāga story. The *udakumbha* (homologue of the uterus) and the similar cocoanut have worked their way into all Brāhmin ritual. The Iyer Brāhmins of the south worship (as Varalakṣmī) the pot filled with grain, with the mask of a goddess attached at will to the side; the fertility symbolism is unmistakable. Pargiter, ignoring all this, separates human from mythological figures of the same name by some criterion of his own. He saw, for example, that marrying women with river-names was considered dangerous by the Manu-smṛti (*P*. 135, Ms. 3.9) though no longer so regarded in India. That this derived from an original custom of sacrifice to or by the river-goddess of some quite human husband has not struck him at all, though the whole Bhīṣma-Ambā-Śikhaṇḍin tale means just that. Yet he notes that Urvaśī is also a river: originally the Ganges (*P*. 135). Other *apsarasas* like Menakā, Śakuntalā, Alambuṣā, Ghṛtācī appear prominently in royal genealogies, but to him they are just ordinary women having those names. The only possible interpretation here is the comparatively peaceful mingling of the different cultures, the more dominant reckoning descent in paternal line, but the older (and probably far more numerous) from mother-goddesses and perhaps through the mother. The *apsaras* appear in pairs as companions of each god, not only in the *Yajurveda* but in temples down to the thirteenth century at least, as for example the desecrated Hoysaḷa structure at Somanathapuram in Mysore [modern Karnataka] state. They hold in one hand the lotus, *puṣkara*, and in the other an object which puzzles the more ignorant archaeologists, but which is known to be the seedpod of the lotus—a fertility symbol, as was the pomegranate in Crete and at Elephanta. The prototype of these goddesses is to be seen in the Lauriya Nandangadh goldleaf figure,[1] and the ring-stones found in U.P. Far better for our purpose is the goddess on the coin of Peukelaotis,[2] who also holds the lotus and the seedpod. The goddess is called *puṣkaravati-devatā* (*pakhalavadi-devada* in Kharoṣṭī), her name on the other side being hitherto unread. (Fig. 1) It is a brilliant suggestion of my colleague V.V. Gokhale that this could be *AMBI* in Kharoṣṭī, so that the goddess of the *puṣkara* is not only an apsaras[3] but also a mother-goddess. From the human representatives or priestesses of such goddesses, we get the later degraded institution of hierodules, the temple-girls and devadāsīs corresponding precisely to the various types of society that developed successively. At an intermediate stage are the 'mothers', *mātṛkās* of the *Artha-śāstra*, who have the special position of madames in state-organised prostitution. These successive changes only reflect changes in production, in methods of organising social classes, as well as transmitting property.

Thus a good deal of the Purāṇic material is for the anthropologist rather than the historian. The latter may, nevertheless, ponder statements which Pargiter takes casually. How is it that Rāvaṇa, villain of the *Rāmāyaṇa*, is a Brāhmin, the gotra being still recorded among the Vasiṣṭhas? Why are some Agastyas counted among the Rākṣasas (*P.* 241–3) which means demons, generally indicative of non-Āryan aborigines? Why is the *wife* of the Brāhmin Dīrghatamas a śūdra woman (*P.* 220)? The most plausible explanation for the survival in Brāhmin records of such embarrassing tradition (*P.* 306–7) would be precisely that *some* Brāhmins had to admit their descent from non-Āryans or pre-Āryans, not all of whom had initially been absorbed

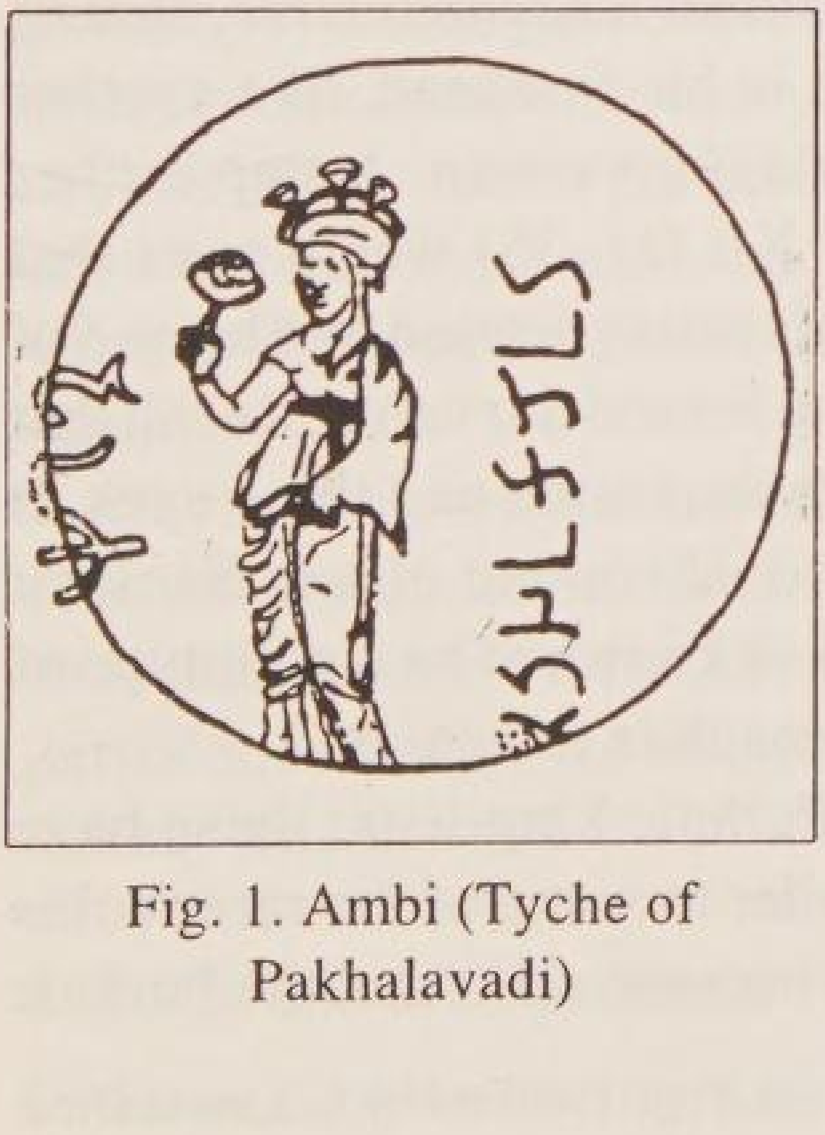

Fig. 1. Ambi (Tyche of Pakhalavadi)

into a common society and culture with the intruders. This, in its own way, supports one portion of his theory, which is untenable as a whole for reasons given.

It is most essential at this point to show that our own surmises have good historical support, even apart from Purāṇic folklore interpreted in the light of anthropologists' reports. Birth from a jar, urn, or pot continued to have its own high significance. The *Matsya-Purāṇa*, 275 describes the entire ceremonial rebirth, the royal person being inserted in a crouched position in the golden womb-vessel: *hiraṇyagarbha*; then the ritual formulae are recited as over a pregnant woman, after which the reborn prince steps out. The golden vessel, naturally, is presented in fee to the Brāhmin priests. This is only one of the 16 *mahādānas*, (*Matsya, P.* 274–90) in several others of which the golden vessel appears as representing a goddess or her womb; particularly in the sixteenth, the *mahābhūtaghaṭa*. The really interesting development is that the *hiraṇyagarbha* ceremony was actually performed by, and recorded in, the inscriptions of more than one historical king. This has been discussed by D.C. Sircar in his *Successors of the Sātavāhanas* (Calcutta 1939, Chap. 3.1 & pp. 51–2). Such 'rebirth' may account for the fourth-century Kadamba king Mayūravarman being sometimes referred to as Mayūraśarman, i.e. both as Kṣatriya and Brāhmin. In his case, we see a far more interesting development. Kadamba is the name of a tree, obviously a clan totem. This is not sufficiently respectable for the later Kadambas, who (or whose priests) invent a better origin about which Mayūravarman's own inscriptions are naturally silent. In an inscription of AD 1118 (*Ep. Carnatica*: Shikarpur 117)* we are told of the ancestor, 'From a drop of sweat from the broad forehead of Hara, *in the ground* under a *kadamba tree*, sprang Kadamba with four long arms and an eye in his forehead, like another Purāri (Śiva).' From him was born king Mayūravarman. A step further is seen in another inscription (*Ep. Carn.* XI: Dg. 35) which says that Mayūravarman was himself three-eyed; this retrogression into legend of a perfectly historical character is not without reason nor value. Recall that Śiśupāla, king of Cedi, was also born with four arms and three eyes. It will then be clear that assessing the historical content of any Sanskrit record is not simple. Inasmuch as the *Mbh.* is known to be a prototype of the Purāṇas, it is seen that Pargiter's approach is too naive.

Pargiter's real service is collation of Purāṇic king-lists; these have helped give some sort of chronological order to some of the rarer coins and inscriptions; but at every stage, it has become clear that the Purāṇic

[*The full reference is: *Epigraphia Carnatica*, vol. 7, pt. I, edited by B. Lewis Rice, Bangalore, 1902, pp. 84–5, 212–17.]

tradition even for their latest period is never completely reliable, its emphasis generally misplaced. Parallel observations may be made about numerous conjectures as to the origin of the Indus Valley urban civilizations, where we have considerable material from (rather inept) archaeology but no real literary tradition. The real historical content of the evidence comes not from the origin but from the *end* of the cities. One or more invasions that gave the final impetus to decline and extinction by destroying the river-dams; reorganization into pastoral tribes constantly at war with each other—Āryanization; acquisition of a new type of tribal property, in human beings who were not members of the tribe—the Śūdra caste; inner differentiation of the tribe proper into the three twice-born castes; slow migration to the east and opening up of the Gangetic wilderness by means of the expropriable Śūdra labour. These are the demonstrable conclusions[4] which supply us with a most important stage of ancient Indian history. What class structure the Indus cities had, whose surplus they expropriated and whether primarily by religion (as seems most probable) or force is not clear. But it is quite certain that new direction was given to the whole surviving population which enabled new, heavily forested territories to be opened up. The caste system represents nothing more or less than the attempt to fix a class structure at a primitive level of production; its flexibility permitted the absorption of newer tribes and guilds; its religious basis, on the other hand, helped maintain stagnant productive forms while preventing large-scale plantation slavery or chattel slavery. Its supposed unshakeability and inherent strength vanish as soon as new forms of production come in: when railways jumble people together regardless of caste and are much more efficient as well as cheaper for the passenger than a bullock cart; when factories produce better goods cheaper, employing labour that has no caste-guild technical secrets of any use at the machine. The modern Indian city implies productive relations not based upon caste, often in conflict with caste, whence the system is least effective in our cities, in contrast to the villages.

Cuvier restored the complete structure of an extinct bird from a piece of fossil leg-bone. But he did not attempt to tell us what design marked its feathers, nor would he have ventured to restore the creature from some part of such design. He who studies ancient Indian tradition would do well to keep this in mind.

3. *India and Mesopotamia*

In this section we attempt a difficult and even dangerous task, namely the tracing of parallel motifs across continents and through the centuries.

The sole justification is the need to collate material objects with the record; it need not again be emphasized that similar designs or legends may recur without any visible connection, under widely separated circumstances, with quite different significance in varying contexts. On the other hand, the specific parallels of this section can hardly be accidental.

It is admitted by the soberest of scholars[5] that there is a layer of cultural tradition common to the Indus Valley and Sumeria, far beyond accidental coincidence. This is not on the basis of legend and myth but archaeological discovery. Presumably this common tradition goes beyond what can be ascribed to direct imports or trade influences. We have, for example, the following comparisons between seals. Fig. 2 shows the 'naked athlete', usually called Gilgameś, strangling two lions, being the detail of a Fara seal; the second figure (Fig. 3) shows a similar performance on a Mohenjo-Daro seal.

The only difference is that the Indian is ungirt, while the beasts he strangles must be tigers rather than lions. The Mesopotamian type persists through centuries; the Indus seal is also not unique. Then we have the bull-man with long braided hair, Enkidu, companion of Gilgameś seen stabbing a lion in the back in Fig. 4. The corresponding Indus seal (Fig. 5) is neither unique, nor a direct copy. On some Indus copper plates, the bull-man is shown on the war-path (armed with a bow) which is not a known Sumerian development. As the dates of the two sets of finds correspond approximately, the conclusion set out earlier appears justified, quite apart from the other similarities in the two sets of brick-built cities. This can be pushed too far in several directions. L.A. Waddell[6] tried to read the Indus script directly as Sumerian, being helped by an ignorance of the cuneiform syllabary as well as by a poor grasp of our rather confused Purāṇic tradition. With far greater experience and prestige, B. Hrozny[7] read the seal legends after Hittite models, a procedure that has been justly criticized on historical and internal grounds as arbitrary, confused, unconvincing. Pran Nath[8] took the Indus language as Sanskrit, utilizing the rather small but undoubted affinities of the script with Tantric symbols and Brāhmī to give what amounts to a set of unsystematic conjectures which can easily be disproved. The approach of Fr. H. Heras, S.J. to the unknown language as proto-Dravidian[9] is by far the most attractive;

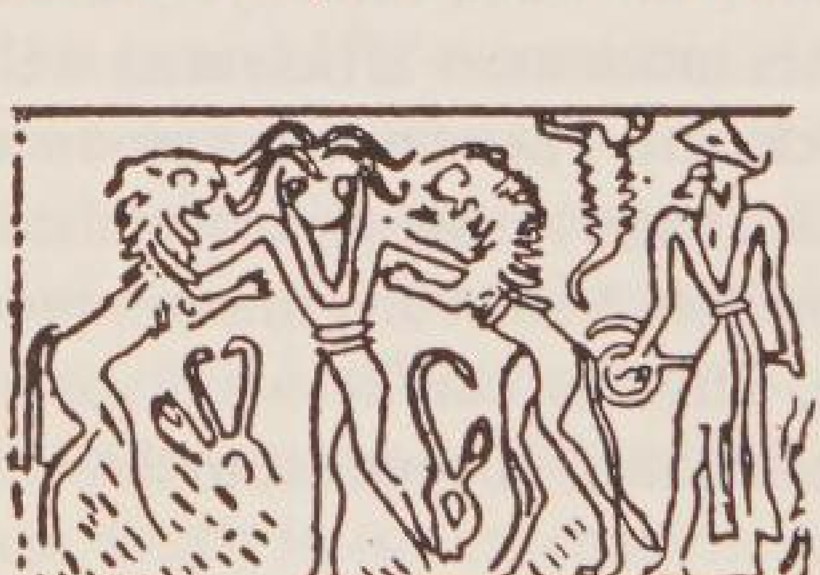

Fig. 2. Gilgameś in Mesopotamia.

but his actual readings seem to me still doubtful. The seals undoubtedly have a religious significance, but a commercial *purpose*, to protect the sealed goods, perhaps by imposing a taboo. If so, Hrozny's readings are at least in the known style of such seals elsewhere, while those of Heras are not. The connection with South India cannot be reciprocal, no matter what the langauge, because of the same material objections as were raised to Pargiter's thesis of a Gangetic origin. It is conceivable that the Āryan invasion *scattered* the Indus culture and some of the people to the south, as it did to the east. Clearly, each of these scholars has attempted to generalize just one small facet of the problem into a complete foundation.

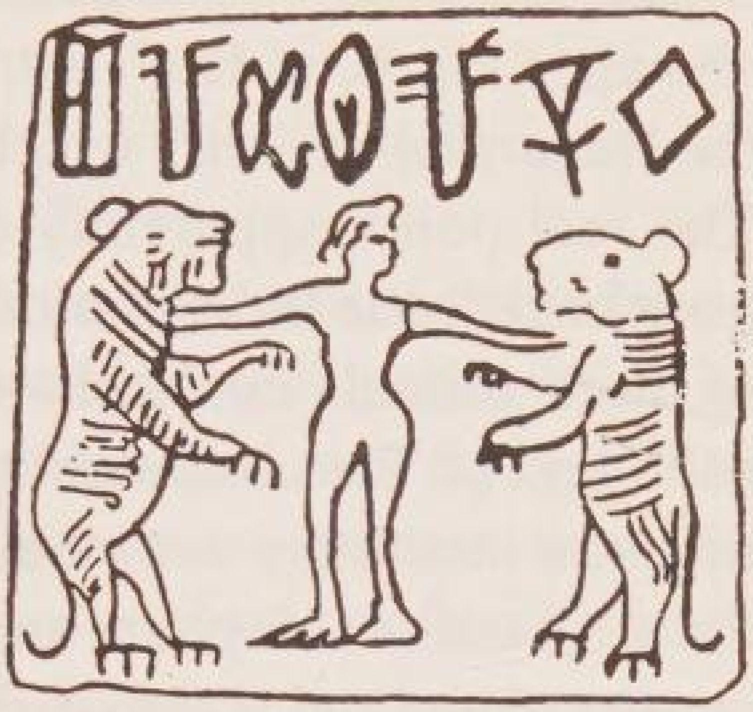

Fig. 3. The Tiger-Fighter in Mohenjo-Daro

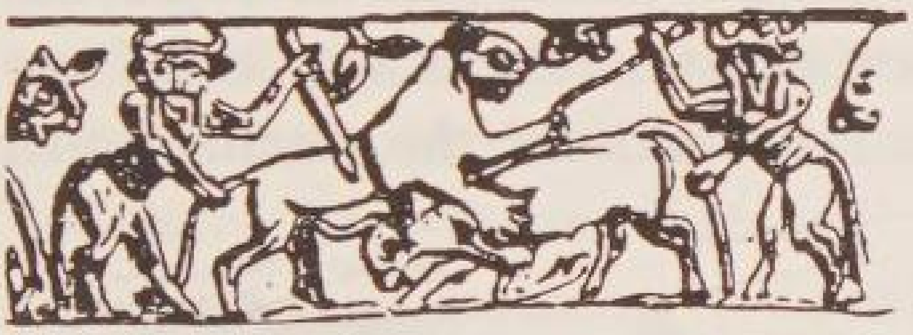

Fig. 4. Enkidu stabbing a lion in the back, after a seal of Sumer.

1. THE GAJA-VṚṢABHA

The *Tantrābhidhāna* gives an index of Tantric signs with their syllabic equivalents, which is of very little value in reading the Indus script. Even if the phonetic equivalents had remained unchanged, we still do not know how the sign itself, described by a vague Sanskrit word, is to be drawn; the few surviving Tantric adepts themselves cannot draw these symbols with any certainty, or measure of agreement. On the other hand, it cannot be denied that letter and syllable are still equivalent in Sanskrit, which has in fact forced its various alphabets to conform to this scheme.

In support of Tantric survival, one may consider the *gaja-vṛṣabha* (elephant-bull) a compound animal. Today[10] this is represented as two beasts with a joined head, the elephant bearing Indra, the bull Śiva. However, the hybrid monster is itself the main object, as proved by its repre-

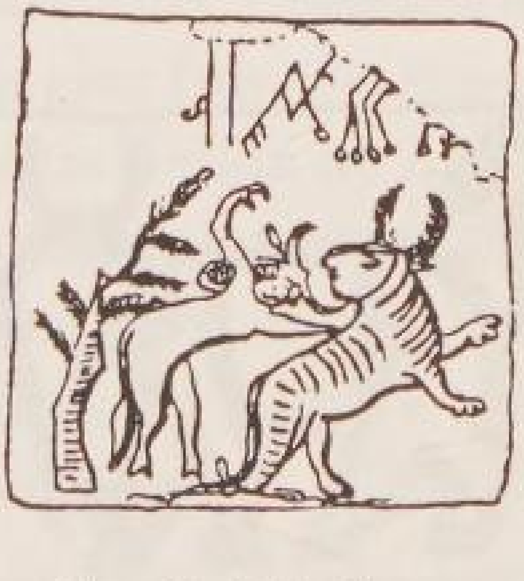

Fig. 5. A bull man stabbing a tiger in the back, on an Indus seal.

sentation, without the gods, on many southern temples. A sample is shown in Fig. 6, and its Tantric bearing proved by reference in works like the *Mahārthamañjarī*,[11] which treat it as a long-known picture, *citraviśeṣaḥ*. The real point, apparently overlooked hitherto, is that this cult-figure goes back to the Indus period. Fig. 7 from Mohenjo-Daro shows how two or more animals could share heads; we find also beasts with a head at each end of the common body. The real *gaja-vṛṣabha* is a compound monster (and there are other compounds in the Indus Valley seals) with the attributes of elephant and bull blended. Fig. 8 shows this on an Indus copper plate [and it also occurs] on one of numerous seals (Fig. 9). The remarkable feature of this chimaera is that it is also found in Sumerian glyptic in the Jemdet Nasr period (Fig. 10), roughly contemporary with the oldest flowering of the Indus culture. The elephant is not a Sumerian animal, whence the guess is justified that this is an Indian cult-object adopted in Mesopotamia. This significance, presumably, is a fusion of two originally distinct clan-totems or cults. For Tantrism, the meaning now

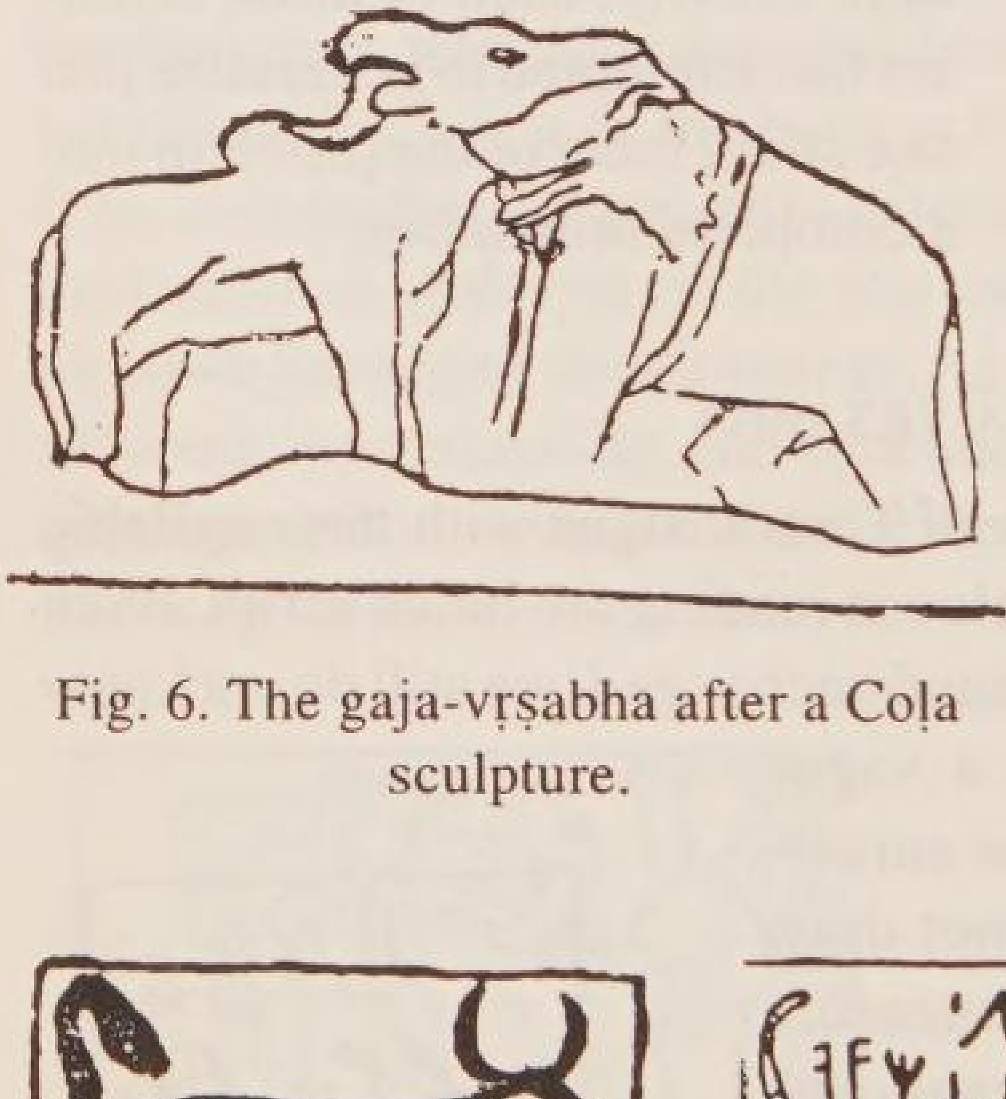

Fig. 6. The gaja-vṛṣabha after a Coḷa sculpture.

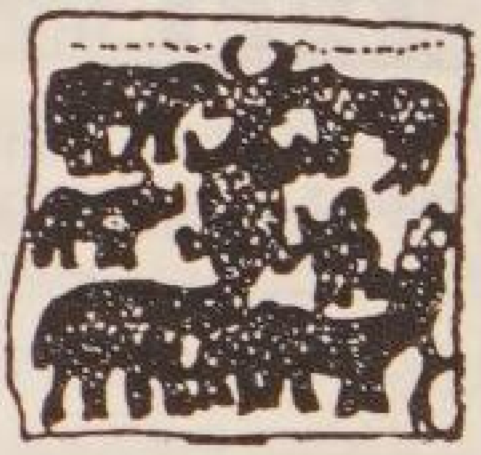

Fig. 7. Two animals sharing heads on a Mohenjo-Daro plate.

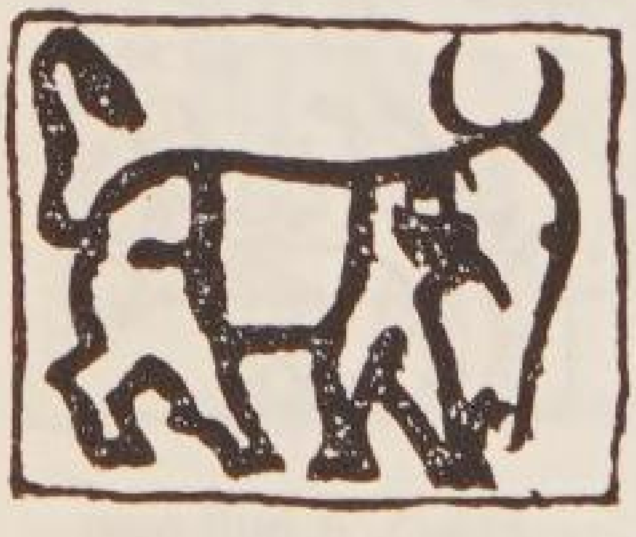

Fig. 8. A compounded bull-elephant on an Indus copper plate.

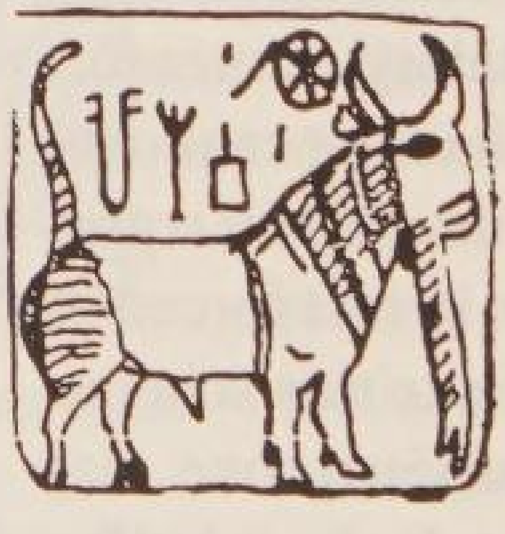

Fig. 9. Another bull-elephant compound monster on an Indus seal.

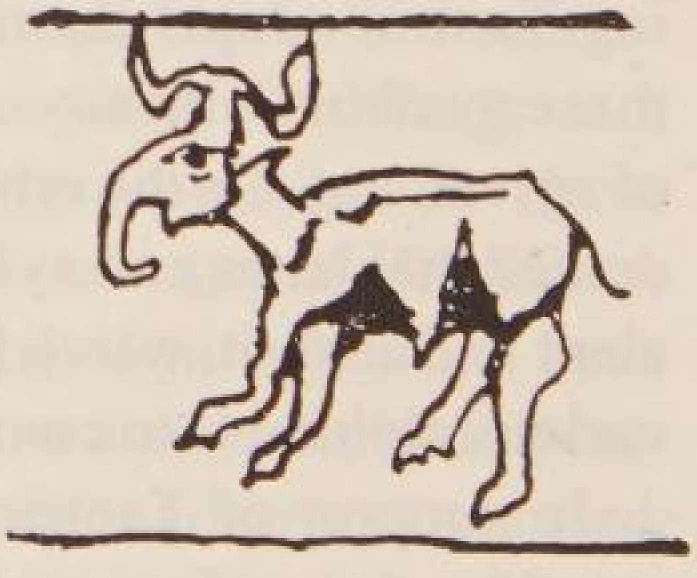

Fig. 10. A Sumerian compound monster of the Jemdet Nasr period.

is purely religio-philosophical, with no indication whatever surviving of its origin.

2. THE FOUR-ARMED GOD

The most sensational of Mohenjo-Daro finds was the seated three-faced god (Fig. 11) surrounded by animals. The pose being characteristically Indian, the figure was at once taken as Śiva-Paśupati, or Prajāpati; the possibility of a fourth face away from the observer was also noticed, so that the god might as well be Brahmā. However, we have Śiva in later iconography with one head, three, four, or five; besides, he has a 'son' Skanda with six heads, being the son of six mothers, the Pleiades. These circumstances prove only that polycephaly is very ancient for traditional Indian gods, but its particular significance in this case can easily be overestimated.

In the first place, the horned head-dress and the three faces both prove that we have to deal with a lunar deity. As such, the type need not be local. Secondly, Śiva means 'blessed', while the Indus god's real name was probably secret, as with Yahveh. The oldest surviving Indic notice of a tricephalous immortal is in the *Ṛgveda* x.8, namely the three-headed Tvāṣtra *killed* by Indra and Trita though the hymn is ascribed to Tvāṣtra himself! What makes this particularly interesting is the Iranian myth of Thraetona Āthvya[12] killing the three-headed Azi Dahāka. In this latter case, we may point to Sumerian seals as in Fig. 12 which show a snake-god (Ningiś-zida, later Tiśpak) with two snake-heads springing from his shoulders, which fits the description of Zuhāk (= Azi Dahāka) in the *Shah Nameh*. This particular conflict, presumably the violent destruction of one cult by proponents of the other, is thus hard to localize, and may have occurred as a historical event in more than one place. Thraetona was born in the 'four-cornered Varena', Gilan, or possibly an older place in Uzbekistan to which the original Var of Yima has been localized by the archaeologist Tolstov. Indra too is an intruder upon the Indian scene. Yet the god of the three heads— actually faces, with each eye doing service for two adjacent faces—is certainly an Indus character.

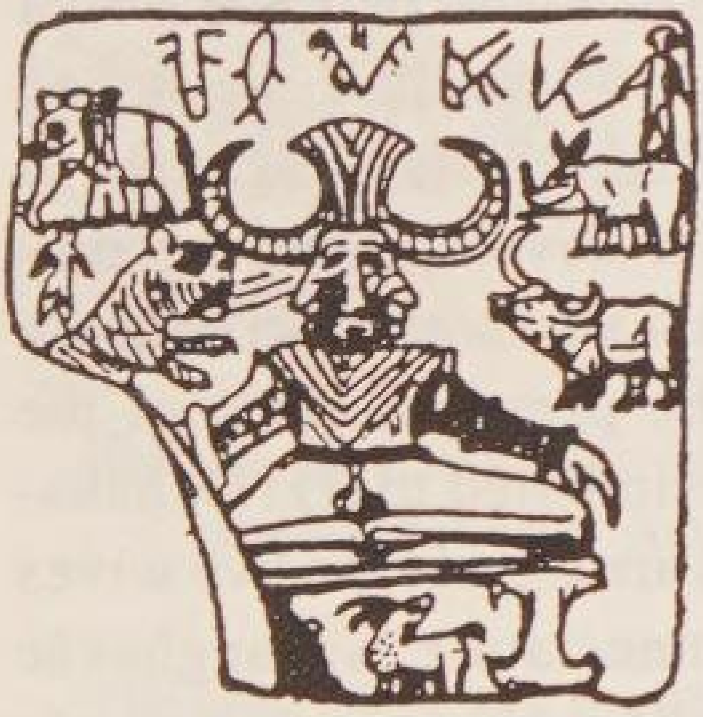

Fig. 11. The Three-faced figure of God on a Mohenjo-Daro seal.

Heras was presumably the first to recognize the four-armed god as an

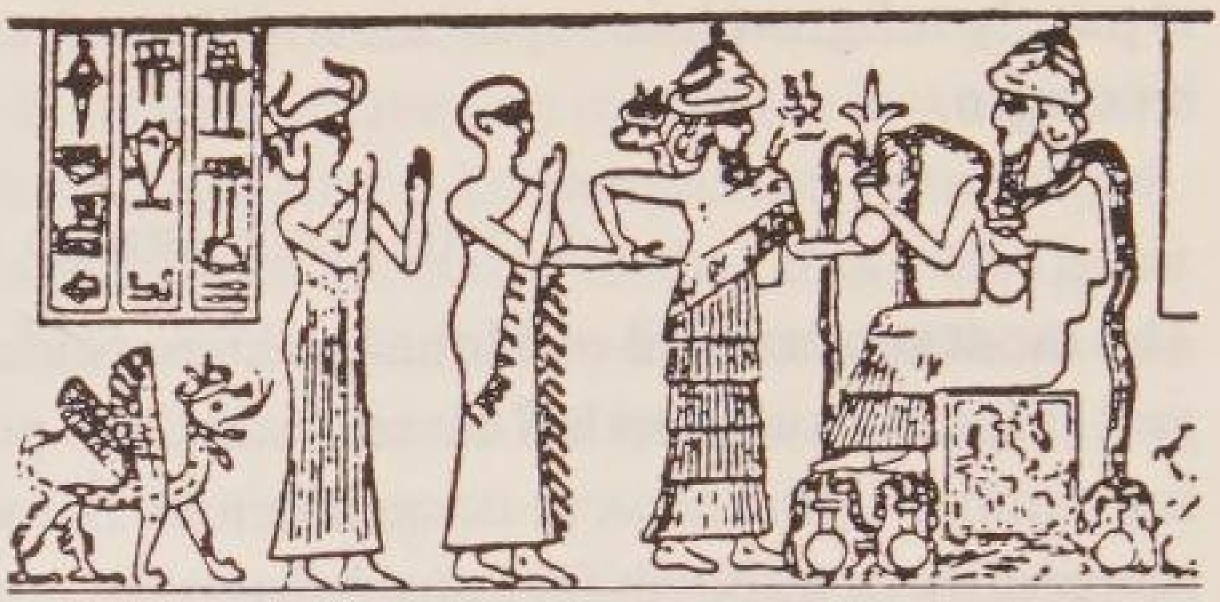

Fig. 12. The snake god on a Sumerian seal.

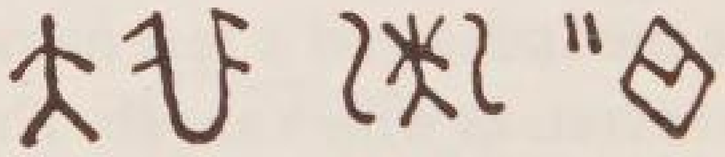

Fig. 13. The river god in a Harappa inscription.

ideogram in Indus seals, a motif that is current in all later Indian iconography. This too has a parallel in Sumeria, though the arms become streams. At Harappa, we find an ideogram giving the homo-sign with the extra pair of arms extended into such streams (Fig. 13), and these shoulder-streams are quite common with Ea and sometimes other figures in Mesopotamia. Fig. 14 shows that besides issuing from the shoulders the streams also flow from a pot held in the hands, not necessarily by Ea; in fact, this may be the original development, the streams rising up from the jar before they cascade down again, and thus seeming to rise from the shoulders. In a later peripheral seal (Fig. 15) we find the naked bearded athlete (Gilgameś or a later development) accompanied by two female deities (a composition that survives even today in some Central Asian folk-dances), possibly the personification of the rivers that flow from his shoulders. If he is assimilated to Azi Dahāka-Zuhāk of Iranian tradition, the two companions are clearly the two wives set free by Thraetona-Feridun: in the older nomenclature, Savanghavāc and Erenavāc.[13] The demon-hero is thus literally a Vācaspati, a purely brāhminical title.

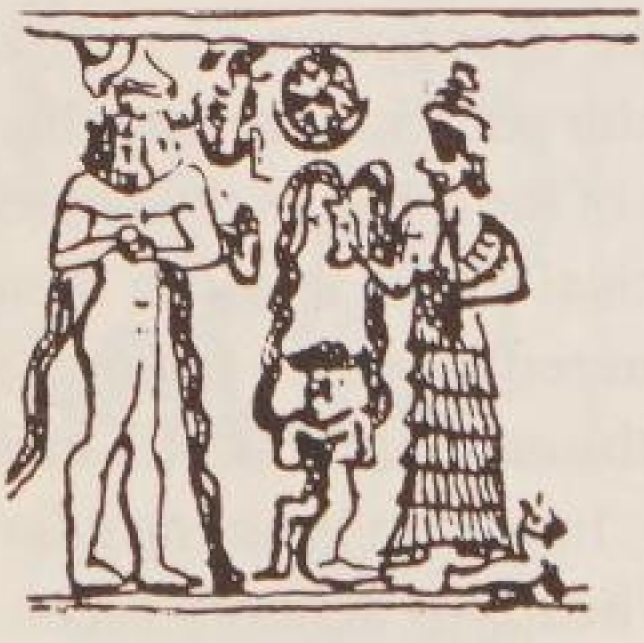

Fig. 14. Streams flowing from a pot in the hands of Ea, in Sumer.

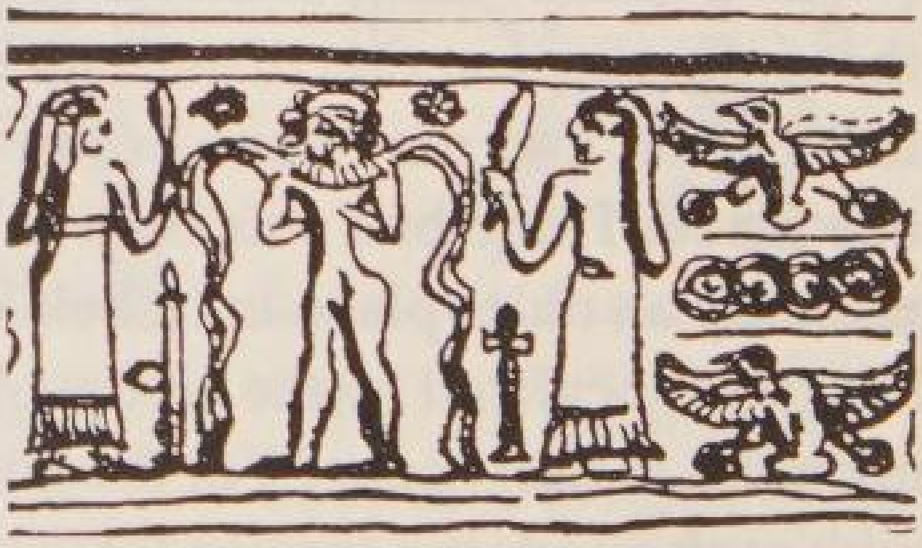

Fig. 15. Streams flowing from the shoulder of Gilgamés in Sumer.

3. THE BIRD-GODDESS

The original Mesopotamian deity who held the jar from which the two streams issued was not male, but female, the mother-goddess Iśtar-Innanna. This is proved by seals that show her holding that jar, as in Fig. 16, where she is seen seated in front of her own statue, receiving a devotee. André Parrot's excavations at Mari on the upper Euphrates have actually yielded such a statue of Iśtar (Fig. 17) holding the jar. The jar is, as with the *kumbha* and golden pot of the *Matsya Purāṇa*, the representation of a uterus, being her fertility symbol, transferred later to male deities when mother-goddess cults were pushed into the background by progressively dominant patriarchy. Peripheral survivals again show the goddess naked, producing the streams from her shoulders, while a smaller figure, apparently her son, duplicates the performance (Fig. 18). Thus the two-streams tradition, and eventually the four arms, must go back to the goddess.

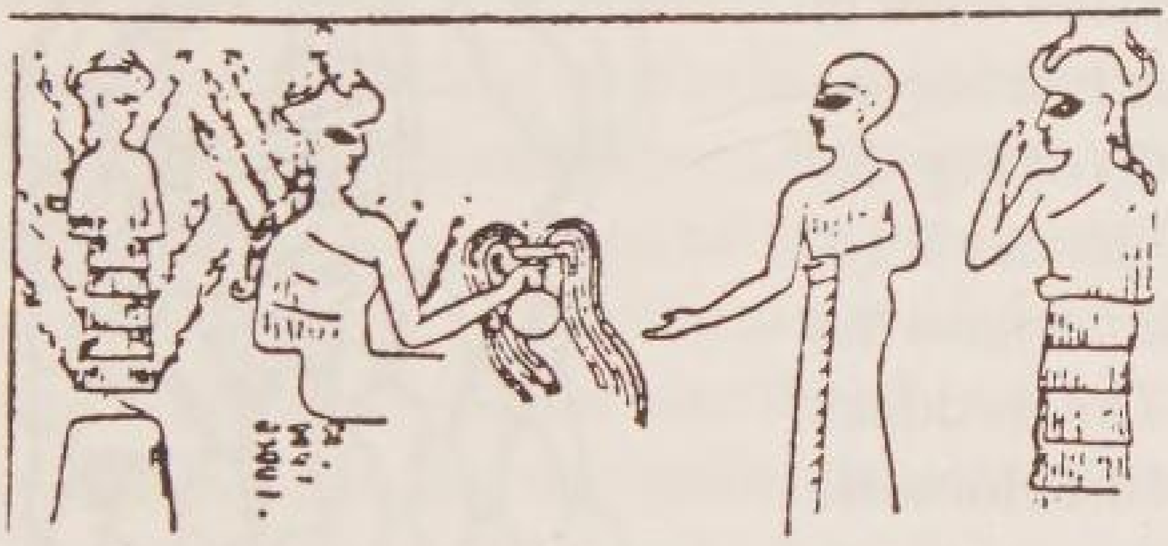

Fig. 16. Goddess Iśtar-Innanna holding a stream pot on a Sumerian seal.

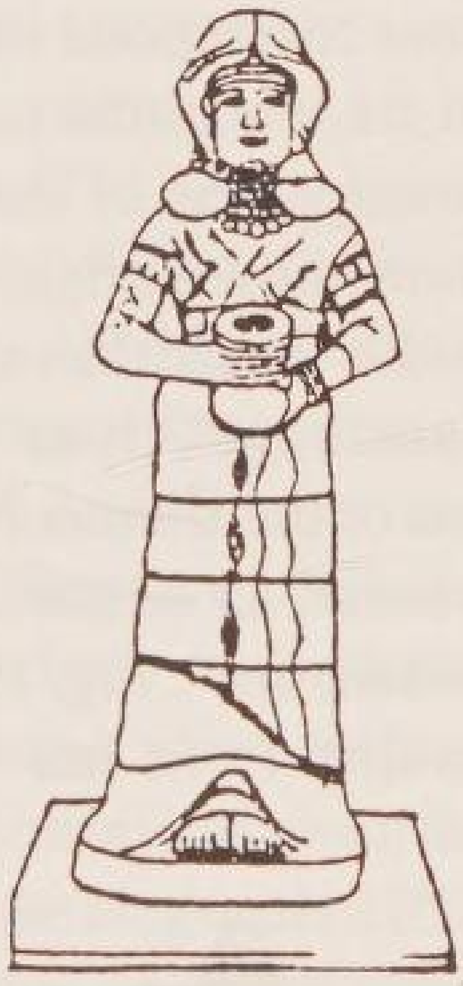

Fig. 17. Statue of Iśtar holding a pot, from Mari.

On seal 89115 of the British Museum collection, we find Iśtar winged (detail in Fig. 19) like the *Ṛgvedic* goddesses. This almost unique type is carried a step further by the winged and bird-*footed* Lillith,[14] of about 1900 BC in the Burney collection (Fig. 20); her owls remind us of Athene, while she is much nearer to the prehistoric bird-goddesses who were simultaneously mother-goddesses too. In the Indus finds we have no winged gods, unless some of the curiously bulged homo-signs (Vats, *Excavations at Harappa*, signs 388, pl. CXV) are to be so interpreted. However, we do have innumerable terracotta finds representing a female (Fig. 21) with a terrifying bird-mask or head-dress. These bird-headed goddesses, with whom the name Śakuntalā might really originate, give us contacts in both directions, with the Vedic

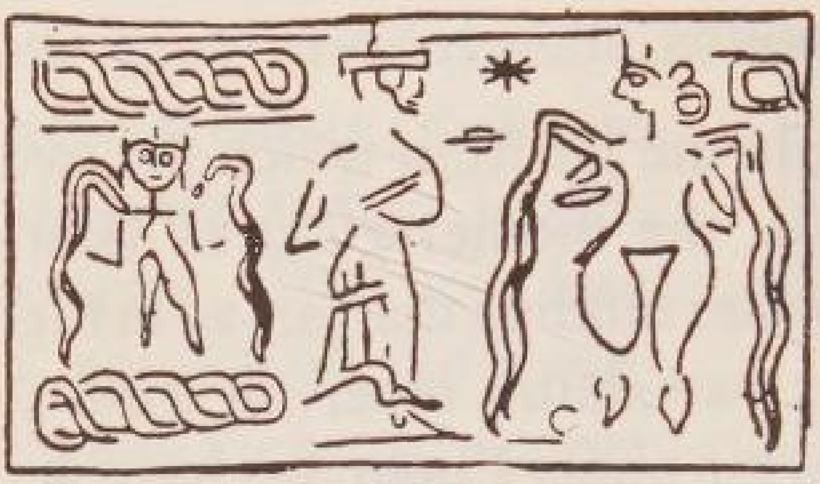

Fig. 18. The goddess and her son with shoulder streams on a Hittite seal.

goddesses as well as with the rare Mesopotamian type which becomes commoner in the later Babylonian and Assyrian periods. Finally, one may note here that some Indus goddesses are dancers, like the *Ṛgvedic* Uṣas. The famous Harappa statuette (Fig. 22a, b), taken to be an ithyphallic dancing Śiva by both Marshall and Heras, is undoubtedly such a dancer. The image, with its unusual rough finish, was undoubtedly coated with some compound, or dressed. The thick neck stump with seven peg-holes was meant to support the headdress, presumably a bird-mask, while the hole in the side of the thigh and the other in front correspond exactly to the two bosses on the low girdle (or loin-cloth) of Fig. 20. Photographs of the Harappa dancer fragment show a slight constriction where the girdle would have passed. The goddess Uṣas is not 'Āryan', in spite of the Homeric Eos or the Iranian Aśi Vaṅguhī, who is addressed as *bānumaiti* = *bhānumatī*, 'The raidant one'. Fig. 19 shows Iśtar with rays issuing from her shoulders, the central rays ending in hands. Thus we have another possible connection with the four-armed deity. For later connections, we may recall that *kara* in Sanskrit is used both for ray (as of the sun) and hand.

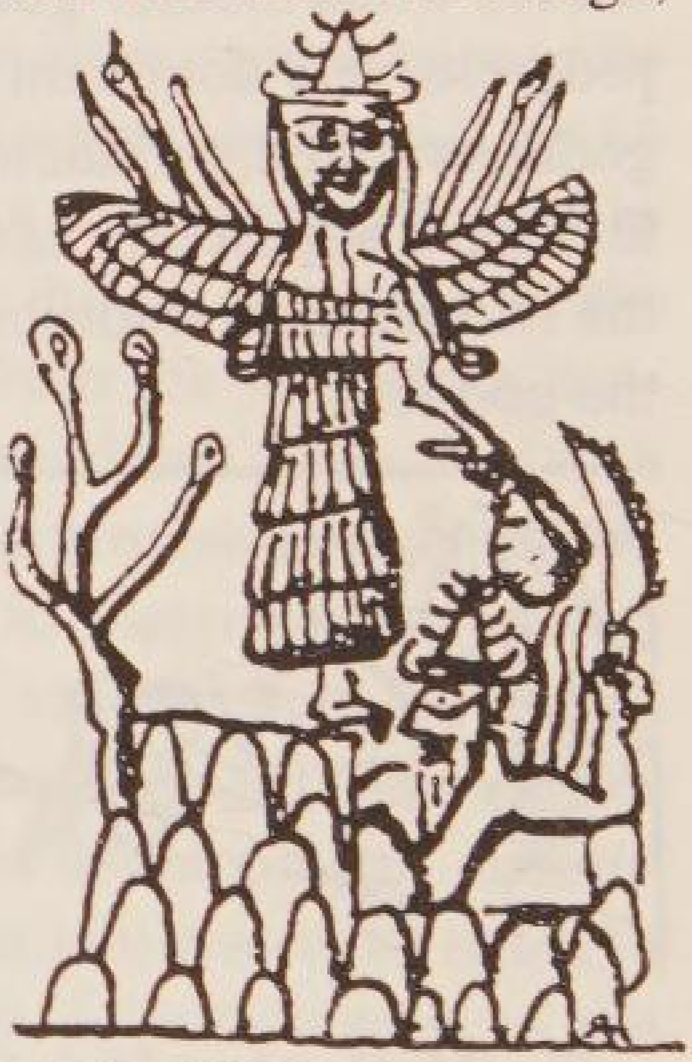

Fig. 19. Iśtar with wings upon mountains, on a Mesopotamian seal.

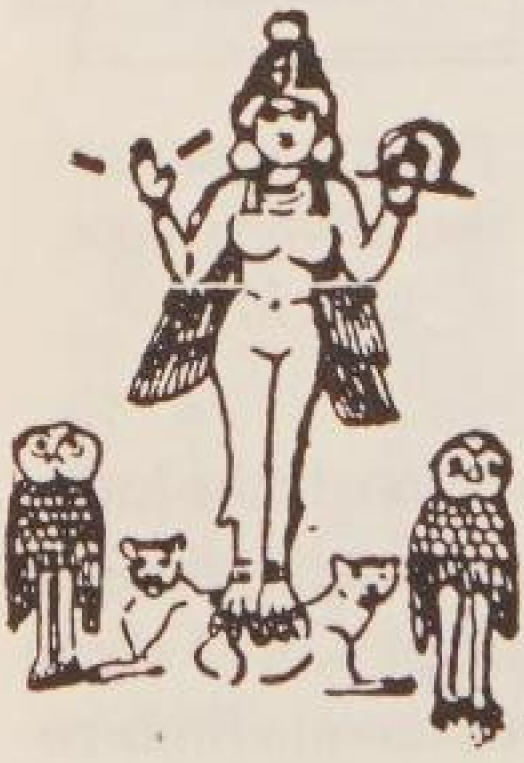

Fig. 20. Winged and bird-footed Lillith of Mesopotamia.

4. THE SEVEN SAGES

These are found in two (published) Indus seals at least, of which the first is a sacrifice (Fig. 23) and the second a fragment (Fig. 24). The 'sacrifice', as was pointed out by Heras, is in front of a compound fish-headed ram; but it has escaped notice that this seal would be an excellent origin for the Triśaṅku legend, for the figure on the right, well off the ground, with his horned trident crown, would be precisely *triśaṅku* in Sanskrit. The sages, however, are prominent both in *Ṛgvedic* and Mesopotamian tradition. A stream common to both cultures, with later comparatively peaceful, assimilation of pre-Āryans by Āryans would account for the late appearance of very ancient 'Semitic' myths, such as that of the flood.

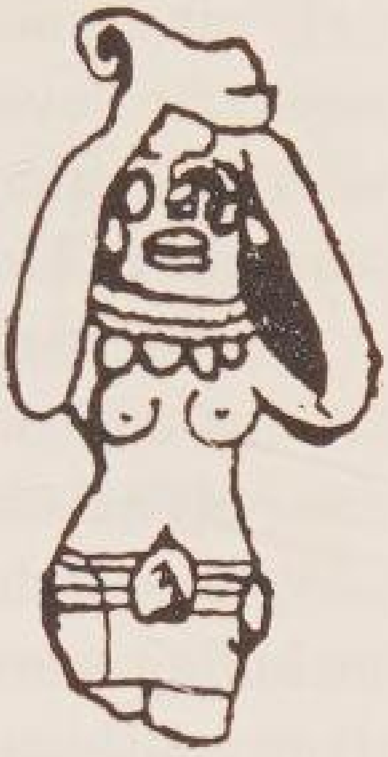

Fig. 21. Terracotta female wearing a colossal head-gear, from Harappa.

The seven seers of *RV*. iv.2.15 reappear again and again in other priestly ways, the 7 *pṛkṣāsaḥ* of iii.4.7 & iii.7.8, the seven paternal ancestor ṛṣis who first formed the *yajña* (x.130.6), the seven *virpāḥ* of iii.31.5, as the ancestral Navagvas and seven vipras (vi.22.2), the seven ṛṣis who were present when Daurgaha was bound (? for the sacrifice, cf. *Śat. Brāh*. xiii.5.4.5, but the name may actually refer to a man whether sacrificial victim or not, not to a kind of sacrificial horse), the seven hymn-makers, *kāravaḥ* (iv.16.3), perhaps the seven friends (and ancestors?) of iv.1.12–13, the seven priests (*hotṛs*, x.35.10) that are an adjunct of the developed fire-sacrifice and with whom Manu sacrificed (x.63.7). In saying all this, Geldner points out also that the further developed sevenfold priestly accompaniment as in *RV*. ix.92.2, x.71.3, iii.7.7, viii.60.16, iii.10.4 of the sacrifice is derived from these. They are undoubtedly the ancestors to whom all brāhmin gotras are ultimately traced, albeit with so much confusion; even the desperate singer of i.105.9 traces his ancestry (*tatra me nābhir ātatā*) by witness of Trita Āptya to the seven rays (*sapta raśmayaḥ*) which, in the context, can only mean the stars of the Great Bear, which is still called the Saptarṣi constellation. The seven sages are given the Pleiades as wives, and as these Kṛttikās are

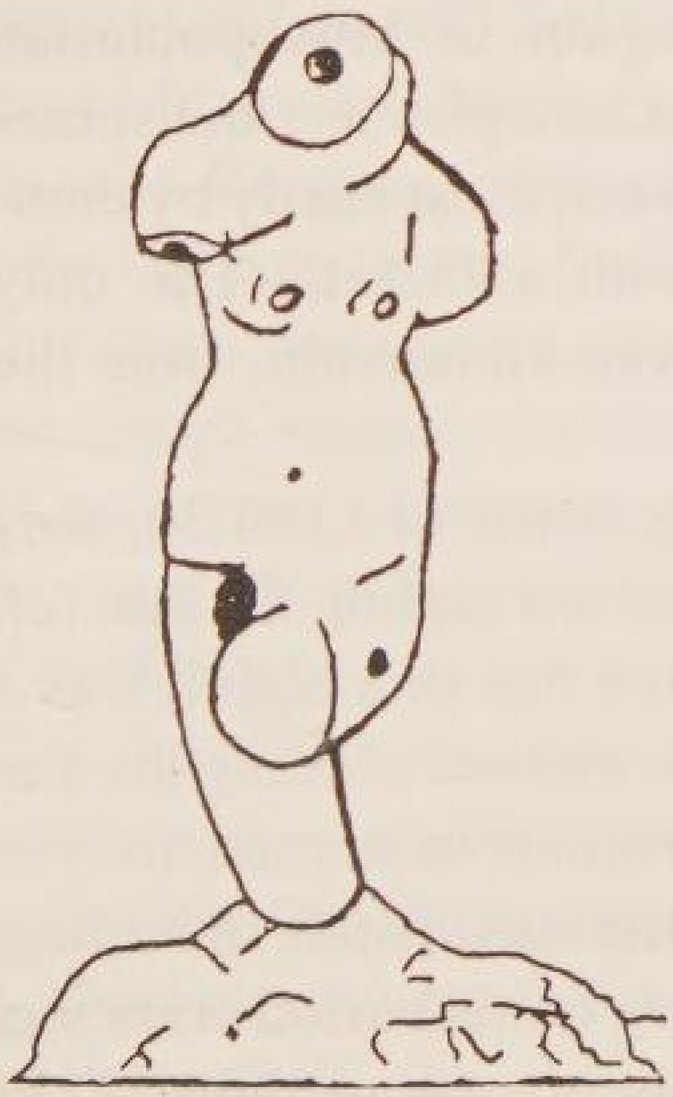

Fig. 22a. Harappa female dancer after a Harappa statuette.

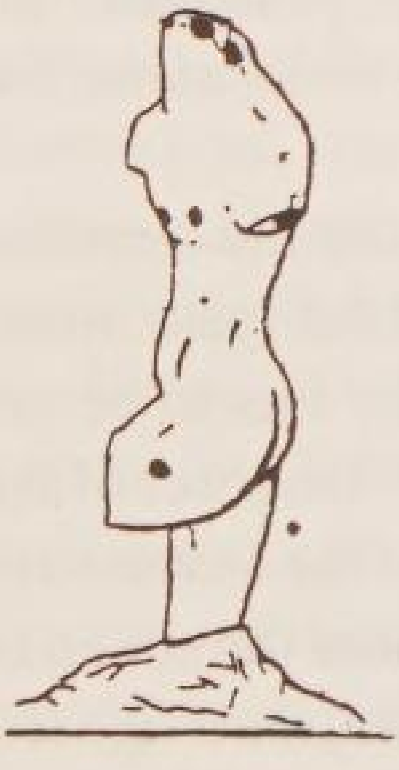

Fig. 22b. Another view of the same statuette.

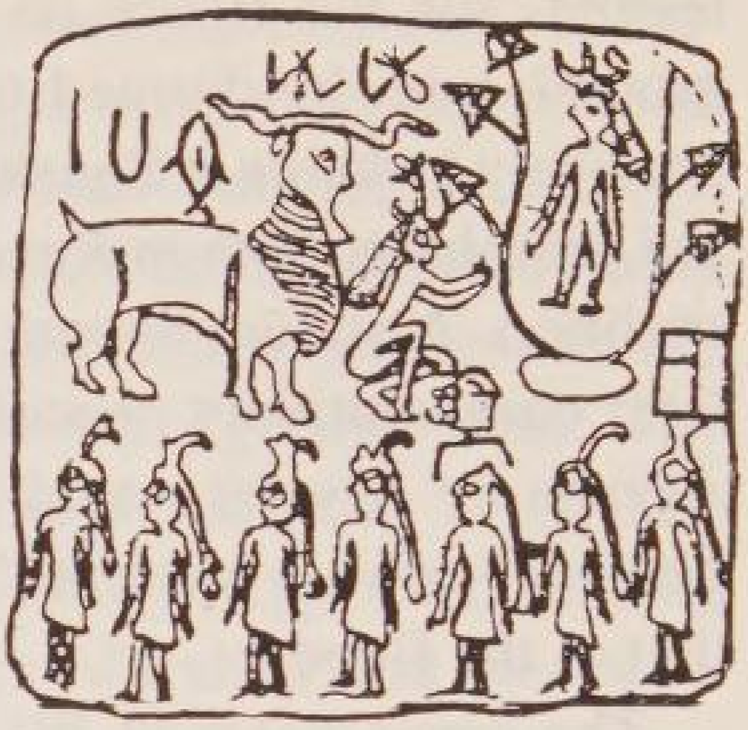

Fig. 23. The seven sages on an Indus seal.

only six in number to the average eyesight, the seventh wife Arundhatī is put with Vasiṣṭha as the 'rider and horse' star pair of Ursā Major.

In addition, however, there is the mysterious cult of the seven mothers, who can only have been the seven great rivers of *Ṛgvedic* India, i.e. of the greater Punjab, including therewith the Sarasvatī-Dṛṣadvatī confluence, which now survives as the dry bed of the Ghaggar and no longer flows via the Mihran into the Indus or to the sea. In *Ṛgvedic* times the Sarasvatī did go to the sea. This need not mean that the Indus was then called the Sarasvatī, but that the desiccation had not reached the later stage, already visible in the *Pañcaviṃśa Brāhmaṇa* (xxv.10) and the *Mbh.*, where the Sarasvatī disappears at Vinaśana in the sands of the desert, to be lost except to the eye of the devout Hindu who sees it join the Ganga and the Yamuna at Prayag. Uṣas is again connected with the rivers, the cows whose stall she opens. This is not a mere pastoral phenomenon of setting the sacred herd free to pasture (as again in Mesopotamian seals, cf. Frankfort, pl. V.e.), but something much deeper, as suggested. That can be seen most easily by comparing iv.1.16 with similar passages, and with x.75.1 ff. The only difficulty is the shift of the river-name Sarasvatī-Harahvaiti, from the Hilmand to India.

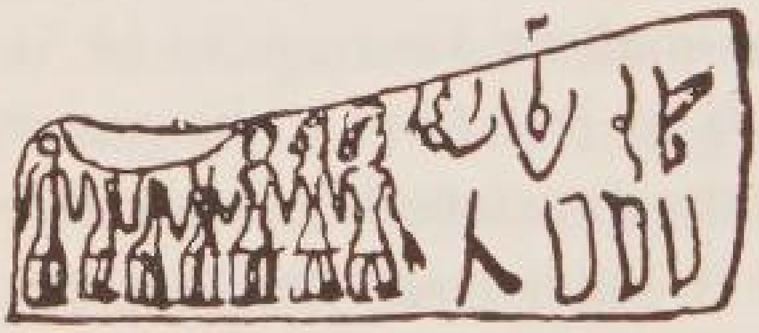

Fig. 24. Fragment of another Indus seal showing the seven sages.

If the seven sages are also the *Saptārdhagarbhāḥ* of i.164.36, they must have been the original Ādityas, brothers of the eighth, the sun (cf. x.72.9), where the possibility has to be admitted that this eighth was a sister, say *sūryā*, later made daughter of the sun instead of being the sun herself. This high position of the seven sages reminds us immediately of Mesopotamian tradition, where the seven antediluvian *apkalle* or *irśūtum* are mentioned again and again, their figures being found buried in ancient ruins. There, these are addressed as the spirits of various days of the week and guardian deities, one each, of the seven most ancient cities of the region, Ur, Nippur, Eridu, Kullāb, Keś, Lagaś and Śuruppāk. But, as H. Zimmern has shown (*Zeit. Ass.*, 1924, 151–4) the tradition is older than the cities, and the original number is seven in any case, an eighth being the sister Narudu. They were seers, sages, or kings according to various reports. It would not be too far-fetched to see in them the founders of the seven traditional gotra-groups, borrowed from pre-Āryan India. As always, the question will arise: just *where* did the foreign legend come into Āryan records? For the Āryans, whether, Mitannians, Medes, or the Vedic group, had successive contact with parallel cultures that stretched from the Caspian to the Indus.

5. THE BHĀRGAVAS

As an example, consider the Bhṛgus, influential from the time of the written *Mahābhārata* (which in fact they rewrote and inflated) onwards and still one of the most prominent Brāhmin *gotra* groups. The word has been connected etymologically with the Phrygians. These people fight on the side of Priam in the Trojan war, and have left archaeological remains that show them to have been as Āryan as any other group related to the battle-axe cultures. Direct equivalence would then lead us to postulate some fantastic emigrations whereby the tribe migrated from Asia Minor to forsake their life of constant fighting and suddenly blossomed out as monopolists of Brāhmin scripture; or conversely, some Indians from the Indus Valley suddenly abandoned their peaceful, wealthy, poorly-armed cities on the rivers that flow through a desert, and turned into adventurers to settle down in Anatolia. My own explanation would be much simpler, *if one insists* (as I do not) that the Bhṛgu-Phrygian equivalence must be transferred from the philological to the ethnographic domain. We first note that the Bhṛgus—uniquely among all Brāhmins—are mentioned as a *tribe*, fighting against Sudās in the famous hymn *RV*. vii.18. This suits the Phrygians, but occurs nowhere in the Brāhmin tradition, which has just one Bhṛgu warrior, the much later Rāma, son of Jamadagni, annihilating *all* kṣatriyas twenty one times. This is merely overcompensation in poetic imagination for the reverse phenomenon, slaughter of the ancestors of the Brāhmins by the warriors. These contradictory tales can be reconciled if one branch of the Phrygians reached India in the course of their wanderings, adopted some pre-Āryans into their priesthood, and were badly defeated in the wars at the time of king Sudās (whose historicity is plausible and generally admitted, the fighting being for the waters of the Paruṣṇī *RV*. vii.18.12). This would account for the disappearance of the tribe as a whole, while the Bhṛgus, as priestly survivors related to other Brāhmins, continue to climb higher into the Indo-Āryan priesthood, making exaggerated claims that would not have been admitted without some foundation in pre-Āryan tradition—for no basis could possibly exist in the Phrygian-Āryan tradition which survived only in a very distant country with another branch of the invading tribe. It should be understood clearly that Brāhminism does *not* mean wholesale recruitment of pre-Āryan clans, but the formation of clan-groups by the adoption of some conquered priests (and far more, their secret lore) into the priesthood of the conquerors.

When we come to discuss any particular legend or technique which seems pre-Āryan, or at least non-Āryan, we are confronted not only with the task of delimiting 'Āryan' characteristics, but also with the possibility of borrowing outside India. For example, the displacement of the river-name Sarasvatī must lead us to consider whether or not some of the events associated therewith might have occurred on the Arghandab. Only systematic and extensive archaeological work can settle the question as to whether the Hilmand-Tarnak complex—negligible though it seems today—of rivers through a desert played an important role in the assimilation of pre-Āryan to a conquering culture (not race). If so, the seven rivers of the Punjab might only repeat an older history on a much wider scale; naturally, the opinion may here be expressed that this seems unlikely on the basis of available knowledge, particularly as regards the origin of Brāhminism.

6. THE LORD OF ALL WOMEN

Brāhmin tradition had a secret portion whose content changed over the centuries, as would be obvious to anyone who studied the Upaniṣads without prejudice. Was the original secret lore that which survived the loss of the Indus cities? Certainly the early development of Sanskrit grammar as a systematized logical study would indicate the presence among Brāhmins of an intelligent, cultured section to whom Sanskrit was a *foreign* language.

When we come to conflict between Indra and Tvaṣṭr, we seem to go well beyond the theological projection of a parallel conflict between Brāhmin and Kṣatriya, or priest and king. This latter type may be responsible for the Dadhyañc Ātharvaṇa story, *RV*. i.84.13–14, with Indra striking off a horse's head from the seer. The designation Atharvan is an Āryan as the horse. In the prehistoric section of the national museum at Copenhagen may be seen the hollowed oak-log which (was supposed to have lined a well-shaft and) contains the intact skull and bones of a horse. Since all the bones are present, none broken or damaged in any way (cf.

RV. i.162.8), while the shaft is much too narrow for the horse to have fallen in, we should have here the *ūbadhya-gohaka*, the lined pit into which the bones and entrails of the Vedic sacrificial animals are to be placed. The Danish archaeologists also found a small pond, almost a well, into which only a horse's skull had been thrown; this corresponds precisely to the horse-head of Dadhyañc in lake Saryaṇāvat, its function being to prophesy at long intervals. Though as much as a thousand years might separate the Danish finds from the Indian record, the 'Āryan' argument could be allowed. The jump here is admissible, for I mean by 'Āryan' a particular form of patriarchal, semi-nomadic, warring form of life, not race. It is otherwise with Tvaṣṭṛ-Tvāṣṭra of the *Ṛgveda*.

In *RV*. ii.31.4, Tvaṣṭṛ is called *bhuvanasya sakṣaṇiḥ*, ruler of the world. In i.32.12, the *deva ekaḥ* can only be Tvaṣṭṛ, clearly on the side of Vṛtra against Indra; the Āryan war-god has to hide by turning himself into a horse's hair. In i.121.2–4, Indra, to whom the hymn is ostensibly dedicated, is given some of the attributes of Tvaṣṭṛ; the designation *trikakup* might apply to the horned god of Fig. 10, but never to Indra. Inasmuch as Indra is not born in that hymn till the 6th *ṛk*, it would make better sense to regard Tvaṣṭṛ as the main subject of i.121.2–4. The entire hymn iii. 38 is similarly taken as dedicated to Indra, though the assumption that Tvaṣṭṛ was its original deity would clarify the rather incomprehensible character of the particular stanzas.

The Indus seals, as has been noted, portray only male animals, in contrast to the innumerable mother-goddess figures found in the same deposit. The traders who used the seals to protect their goods must have worshipped male gods, or totem-cult-objects. The connecting link is precisely the lunar god of Fig. 11, three-faced, with crescent horns. The moon reappears in Vedic ritual as Soma; in *RV*. x.86, as the first husband of all women, the female and the lunar periods being associated from the oldest times. Therefore, can the god of Fig. 11 be not Soma, the moon proper, rather than Tvaṣṭṛ? No! In the first place, Tvaṣṭṛ is invoked, like Uṣas, directly in every Āprī hymn; Soma is the sacrificial drink. Tvaṣṭṛ is the special protector of the *gnās*, the gods' wives in a group; he and not Soma is the fashioner of embryos. Even in the earliest portions of the *RV*., Indra is said again and again to have drunk Soma in Tvaṣṭṛ's house. Finally, we find in *RV*. 1.84.15: *atrāha gor amanvata nāma tvaṣṭur apīcyam; itthā candramaso gṛhe*. Thus the bull is Tvaṣṭṛ's (symbol), while the house of Tvaṣṭṛ also the house of the moon. A similar comept to Tvaṣṭṛ *takṣan* artibier, is seen in the Greek demiourgos, which first means artisan, but in later philosophy the creator of the universe like Tvaṣṭṛ-Viśvakarman. Our Tvaṣṭṛ goes beyond the Greek development, having a demonstrable cult of his own in the oldest times.

The Tvāṣṭra and the Dadhyañc myth are later assimilated by the Purāṇic Hayagrīva story, of the killing of the horse-headed demon. However, the Hayagrīvas are also a tribe (*aśva-mukha*), while the position of the demon is complicated by Hayagrīva being a companion as well as a minor incarnation of Viṣṇu *hayaśiras* in *Mbh*. 5.97.5. When we recall the older myth of Indra in a rage striking off Viṣṇu's head, which becomes the sun, it is clear that facile explanations such as the apotheosis of Kṣatriya–Brāhmin conflict will not do. We have echoes of nearly forgotten clashes between cults later amalgamated. We cannot rationalize after the fashion of Pargiter, simply because the horse cannot be pre-Āryan in India. One may recall that the horse winning the October 15 race in ancient Rome was immediately sacrificed and its head hung up in a public place.[15]

NOTES

1. *Archaeological Survey of India, Annual Report 1906–7*, p. 122, Fig. 4. See also J. Irwin, 'Masterpieces of Oriental Art—16', *JRAS*, 1951, pp. 1–2.
2. *Cambridge History of Ancient India* (ed. E.J. Rapson),* plate VII, Fig. 10. The figure is drawn from special photographs kindly supplied, with permission to publish, by the Trustees of the British Museum.
3. For the *apsaras* and the *puṣkara*, see my 'Urvaśī and Purūravas', *JBBRAS*, v.27, 1951, pp. 1–30. A glance at Jean Przyluski's article in the *Ind. Hist. Quarterly* x, 1934, pp. 405–30, particularly his treatment of the Danaides legend, shows why it was dangerous to marry 'rivers', and how deadly the Mother-Goddess cult was for the male partner.
4. The *Arthaśāstra* (2.1) technique of settlement (supported by Megasthenes) which proves this, has been discussed in my 'Ancient Kosala and Magadha', *JBBRAS*, v.27, 1951, pp. 180–213.
5. H. Frankfort in the beginning of *Ann. Bibl. Ind. Archaeology* (Leiden 1934); from the same author's masterly *Cylinder Seals* (London, 1930), the present note derives many illustrations (drawn by Mr P.C.I. Ganeshsundaram), and considerable data as regards interpretation.
6. L.A. Waddell, *Indo-Sumerian Seals Deciphered* (London 1925); *Makers of Civilization in Race and History* (London 1929) is the saddest manifestation of effort misguided by lack of acquaintance with the ostensible sources.
7. Bedric Hrozny, *Die Aelteste Ceschichte Vorderasiens und Indiens* (Prag, Melantrich, 1941–43), pp. 199 ff. The adverse criticism should not be taken as detracting from the value of the book; it should be remembered that the quite accurate

*[The reference should be: *Cambridge History of India*, vol. I, *Ancient India*.]

but hostile criticism of Hrozny's earlier thesis on the Hittite language prevented his many great contributions to that subject from being recognized. His death, reported last year in Czechoslovak bulletins, will be lamented by all scholars.

8. Pran Nath, *Ind. His. Quarterly*, VII, 1931, pp. 1–52.
9. The best treatment of the work will naturally be in Fr. H. Heras's own book *Studies in Proto-Indo-Mediterranean Culture*, vol. I, which supersedes many individual notes and monographs from his pen.
10. V. Raghavan, *J. Ind. Soc. Or. Art*, Calcutta, 1947, pp. 74–6; the illustration (from which Fig. 6 is drawn) from a Coḷa temple, originally intended for this paper, was supplied by kindness of Prof. Raghavan, along with a typescript of his paper.
11. Trivandrum Sanskrit Series no. 61, p. 74. The relevant passage, which appears in Raghavan's paper of note 10, was first pointed out to me by Brahmaśrī V.S. Rāmacandra Śāstrigal of the Śaṃkara Mutt, Bangalore. Neither he nor Raghavan should be considered responsible for my identification with Indus chimaeras.
12. This should be carefully distinguished from the Vṛtra legend, which has been completely discussed from the philological point of view in Benveniste and L. Renou's *Vṛta et Vṛthragna* (Paris 1934). As they show Vṛtra to signify 'obstacle' or 'barrage' (p. 196), the historical reality, if any, would be the shattering of pre-Āryan dams.
13. The connection of the myth with both Indus and Mesopotamian glyptic has been suggested in my 'Origin of Brāhmin Gotras', in this volume.
14. E. G. Kraeling in *Bull. Am. Sch. Or. Res.* 67 (1937). *Illustrated London News* for June 13, 1936 gives a fine full-page photo.
15. Cf. Fowler, *The Roman Festivals of the Period of the Republic*, pp. 241–50.

SECTION III

Archaeology, Epigraphy, Numismatics and Ethnography

23

Pierced Microliths from the Deccan Plateau*

The artifacts from the Deccan Plateau considered here and shown in the figures to the scale of 5 cm. originate in the late pre-pottery stone age (mesolithic). They are surface finds discovered by individual examination of several thousand artifacts gathered over a continuous many-branched track which extends north and north-west for 60 miles or so from Poona, and some 140 miles to the south-east. Seventy-three of the 74 drilled microliths were found in the middle stretch of this track, from Poona to about 78 miles south-east. The proportion of those pierced to the total number collected is about five per thousand. The heaviest surface deposits and the finest technique of knapping are characteristic precisely of the central portion of the microlith track.

The holes must have been bored with a firmly held bow drill. Bone or wooden drill bits would suffice, if fine sand were used as the abrasive. The rough stone points sometimes used by modern Indian stone-workers in a bow drill would be too brittle for the smallest perforations, which can be cleaned only with a fine needle. The largest hole (Fig. 1, top picture, middle piece; site Kumbharvalan) is about 3.5 millimetres in diameter. The white thread shown in the photographs is Johnson's dental silk floss; where this could not be worked through, 36-gauge BSW copper wire was utilized. The prehistoric makers would have used hair or sinew. No microlith has been counted as pierced unless it could actually be threaded. Many were drilled too close to an edge, which broke off to leave an indentation; these have not been included even when the mark of the drill is unmistakable. None of these microliths are specially prepared as ornaments; those not shaped as tools of standard type are cores.

Man (January, 1962), note 5.

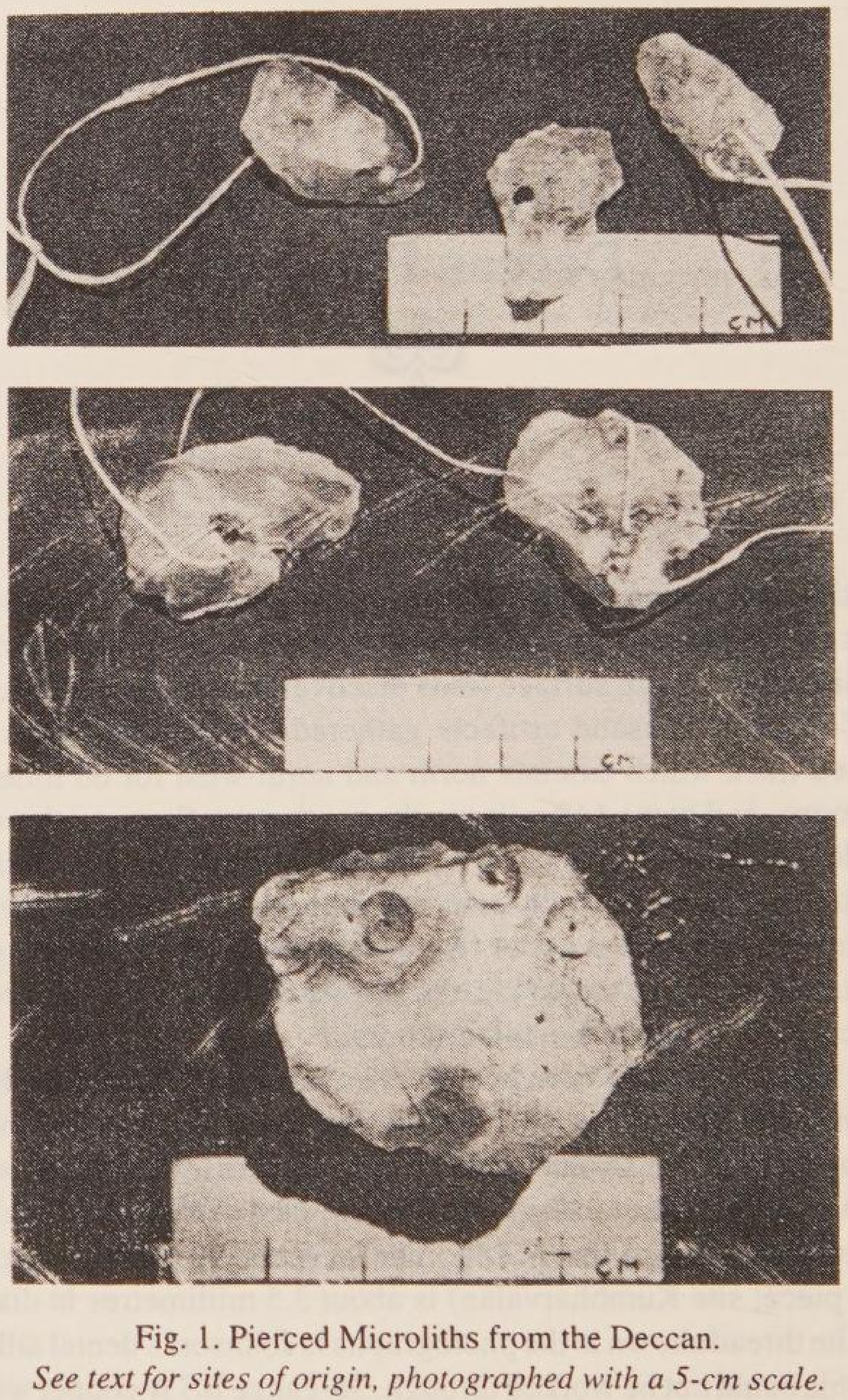

Fig. 1. Pierced Microliths from the Deccan.
See text for sites of origin, photographed with a 5-cm scale.

The chalcedony from which most of these artifacts are made is found locally imbedded in the Deccan trap. When it is translucent, a neat cylindrical discoloration some 4 mm. in diameter can often be seen about the hole. This might be due to the heat generated in drilling. Full advantage was taken by the microlith people to save labour by drilling through softer impurities, natural flaws, pits or partial holes in the material. Many holes start from both sides to meet at an angle in the middle, and this tricky procedure is responsible for some of the failures. Fig. 1, middle picture, shows two pieces from Vidni: in one, some imbedded material like felspar was eventually driven out by the drill, to leave an irregular hole; the other piece was drilled no less than nine times, with four successes (whereof one is amenable only to copper wire). Fig. 1, bottom figure, shows four major attempts, all failures, on a lump of chalcedony found by Mr D.S. Chavda beyond the Poona Leprosy Hospital. Here, the two holes that can be threaded are through the side, and utilize some deep natural pits on that surface. A hole more than 3 mm. deep was apparently difficult to make with the tools employed.

The persistent attempts show that it was imperative, for some unknown reason, to bore through the particular bit of stone. Much better tools scattered in the amplest quantity at the same sites prove that the purpose of drilling could not have been mere convenience of transport. There is nothing special about the drilled specimens as regards size, shape, technique, facets, or choice of material—at least to a modern eye. The most plausible explanation should be that these were charms of some potency, to be used as amulets, pendants, earrings, or components of a necklace (*cf.* Fig. 3). Occasionally, as at Barhanpur, Theur (Fig. 2, top picture) and Bavdhan (Fig. 2, middle picture), modern cults and prehistoric cult sites are found close to the microlith deposits. Yet one of the most prolific (Fig. 2, bottom picture) loci is an eroded field between Kurkumbh and Malad with no modern distinction of any sort.

Local peasants regard microliths as useless bits of stone, though some have heard that sparks can be struck from any flint by steel. Sheep-herders of the Dhangar caste still use freshly made sherds of chalcedony for gelding their rams. The wounds are free from the infection that would follow castration with unsterilized metal knives. (The same reason might have reinforced superstition in the Jewish use of flint knives for circumcision in the metal age.) These stone gelding knives, made on the spot and discarded immediately, are much larger and cruder than any mesolithic blades (which could only have been used mounted or hafted), and without the complicated facets and beautifully retouched edges of the prehistoric tools. The Dhangars make their 'knives' simply by hammering a lump of grainy chalcedony, placed upon a basalt anvil, with another heavy piece of basalt. The old artifacts (pierced or otherwise) are not recognized by the sheep-herders as tools, or even as products of human technology. The

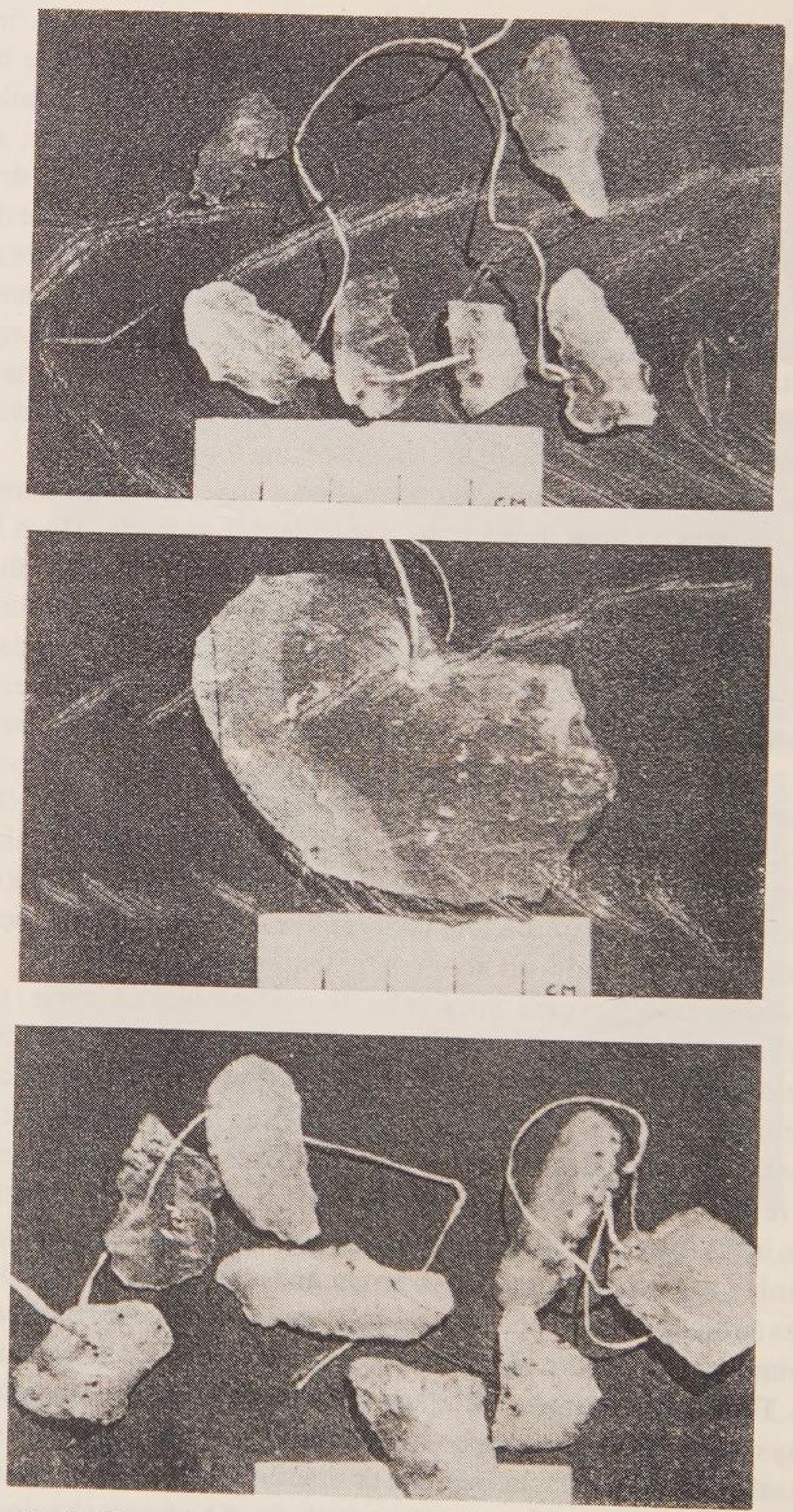

Fig. 2. Pierced Microliths from the Deccan. *See text for sites of origin, photographed with a 5-cm scale.*

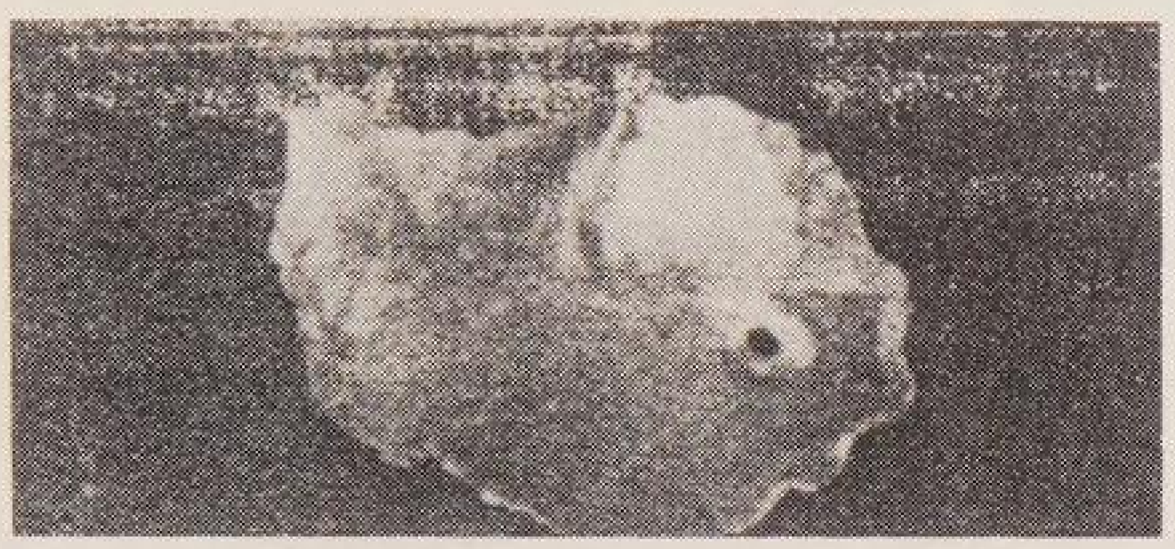

Fig. 3. A Pierced Microlith from Yerandavne, Poona. *Presumably a fish-shaped charm or amulet. Length 2.2 cm.*

microlith track, however, may have left its mark upon the present. The great annual pilgrimage to Pandharpur, so beloved of the Maratha peasantry, probably originated in a seasonal booly over the Karha valley pasture lands through which the central portion of the track passes.

24

Megaliths in the Poona District*

All known South Indian megaliths seem to belong to the Iron Age.[1] The only dated[2] complex falls between 200 BC and AD 50. The sole published report[3] of megaliths in the Poona district refers to structures erected within living memory as menhirs, dolmens and the like. The finds reported here seem to be the first of their type and region that belong to prehistory.

Over a hundred of these megaliths are found in Poona district, from its south-eastern tip at Khanota to Pabal, 40 miles north of Poona. The greatest density and highest technique is concentrated within the village limits of Theur, Naigaum (Plate G*e*, *f*) and Koregon-Mul, on the south bank of the Mula river. The remains here not only cluster as thickly as round barrows on parts of Salisbury Plain, but conform so well to a pattern that one has the sensation of going round in circles when the area is traversed. The normally favoured site is one some natural outcrop of basalt; but some of the large stones—four feet or more on the longest side—have been moved from a distance, and at times raised as capstones upon others. The characteristic marks which prove human artifice are ovals (Plate G*e*, *d*) and re-curved lines graven on many component rocks of the pile, or on the bedrock. A small oval may at times be paired with one much larger to resemble a head with limbless trunk. The bulging interior of many of the ovals (Plate G*d*) gives a curious resemblance to the basalt 'bombs' so often found in the Deccan. But the natural egg-shaped core surrounded by softer layers of rock that weather away can always be distinguished from the gravid ovals engraved on rock of uniform quality.

All the cairns, dolmens, ovals and lines are regarded as natural by the superstitious local peasantry which unhesitatingly uses megalithic stones

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**Man* (May, 1962), note 108. [Figs. 3–4 of the original could not be reproduced for technical reasons].

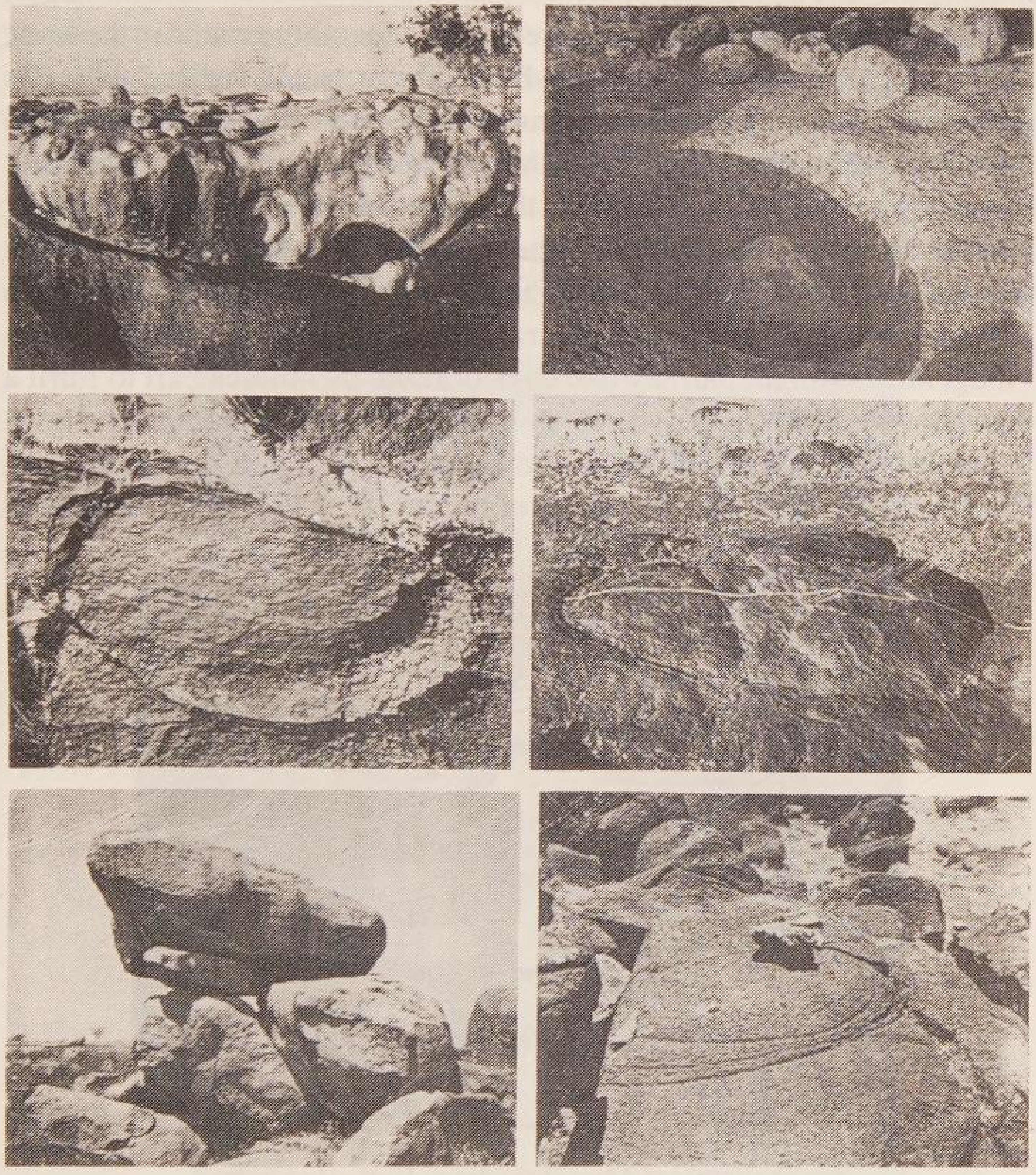

Plate G: *Megaliths in the Poona District*: (*a–d*) Bolhai's Kitchen. (*a*) The Ghat-shill, 'pot rock', showing the 12-inch circle. The cup marks are made by the stones, which are rubbed to produce a clear virgin sound from the top stone, which is supported only at four or five points. The actual 'goddess' is an oral lamp of basalt fitted into the stone under the 'arch'. (*b*) One of the holes in the upper surface of (*a*). (*c*) Oval on bed rock; length nearly 3 feet. (*d*) Large oral on bed rock; length 5 feet 11 inches. (*e–f*) Naigaum High Place. (*c*) The capstone, *c*. 4 feet long, which has deep ovals graven on top. (*f*) Multiple ovals graven on boulder of megalith.

for construction. There is no earthen tumulus, nor evidence for any such having been washed away by the rains, ever found with a megalith. Earth mounds would have been easier to make than the rock piles, given proper digging tools. The frequency with which microliths are found among or near the rocks of the megaliths is greater than for other ground in the same villages, particularly at Theur which was a great fishing camp in prehistory. The megaliths are too numerous in the central area above to have been ordinary places of worship. At the same time, the underlying bedrock makes it very unlikely that they cover burials. Wherever a strong modern cult survives at a well preserved megalith, it is always that of a mother goddess. The best-known is the goddess Bolhai at Vade, who receives the ritual sacrifice of several goats or sheep every Sunday from villagers who might journey two days or more by bullock cart to fulfil a vow. The modern temple is a mile away from the initial monument shown in the photograph. The old site, known as Bolhai's Kitchen (Plate G*a*), lies at an impressive concentration of microliths (Fig. 1), surrounded by numerous megalithic remains. The original goddess is a natural, oval lump of stone, coated with minimum and fitted into a hollow in the wedge stone which keeps the capstone from sliding off the monolithic base. The manmade arch in the capstone under which Bolhai lies does not bear the marks of metal tools. Numerous cup marks on the rock have been formed by the constant rubbing of pestle-like muller stones. The rubbing forms part of a ritual whose significance is now forgotten, though the particular capstone (size seven by four feet, average thickness two feet), being of fine basalt supported only at a few points, emits a clear bell-like tone when struck or when any of the mullers is rubbed in its cup (Plate G*b*). The ringing could not have been the original purpose of this cup, because

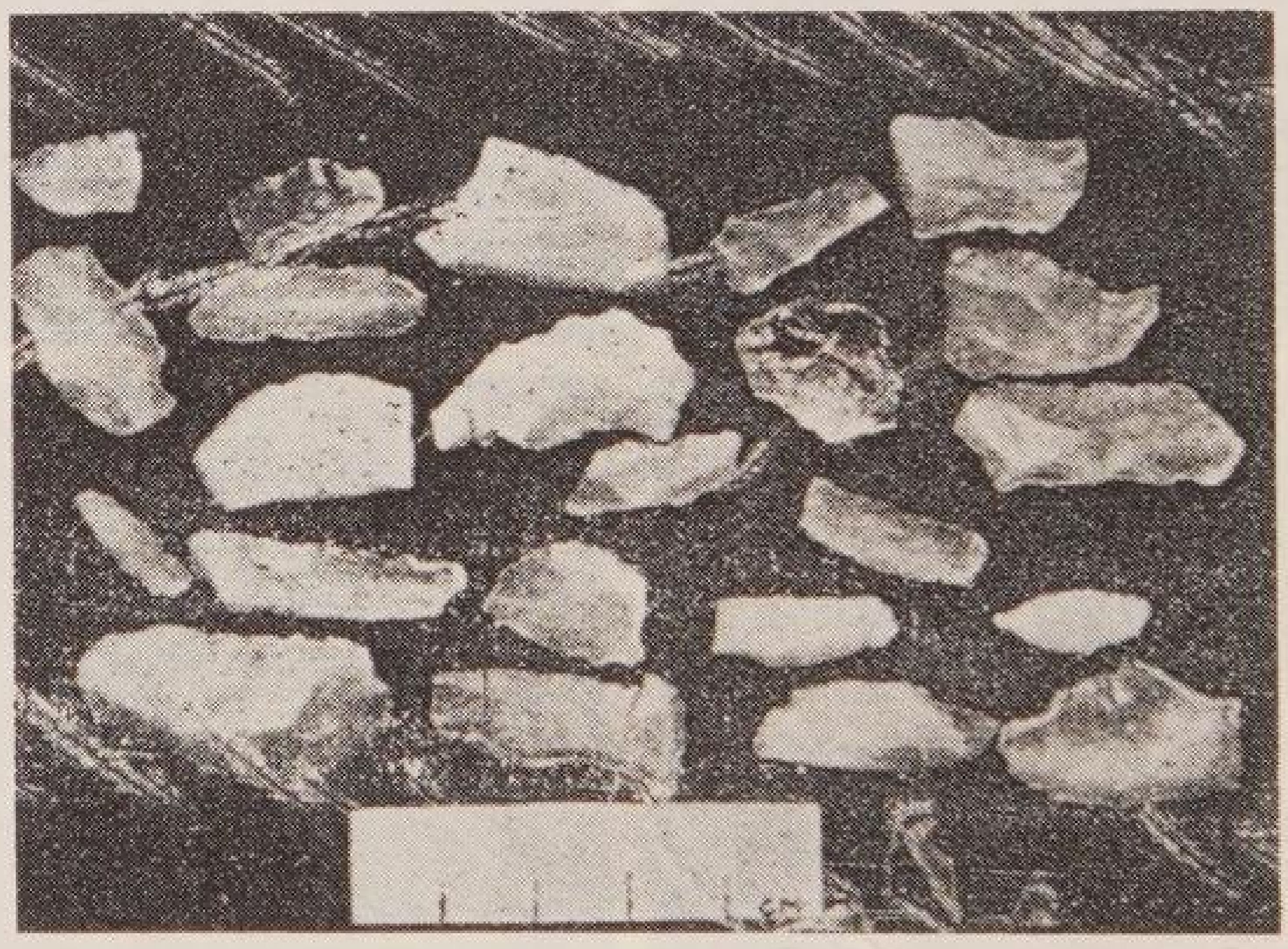

Fig. 1. Selected Microliths from Bolhai's kitchen.

such cup marks are often found on dumb megalith rocks. One cup, complete with muller, is on Bolhai's rock base and emits no sound (Fig. 2). The Satvai of Theur is the mother goddess of childbirth as well as a demoness and the fairy who determines the child's future; she, too, receives numerous blood sacrifices at the megalith which she now inhabits. This pile has been tampered with, but the circle of Satvai like that of Bolhai is ancient. Such (comparatively rare) circles are about 12 inches in diameter (Fig. 3); standardization seems to have been achieved by using the thumb and finger of an adult hand as compasses, for measurement shows deviations from a perfect circle which could easily

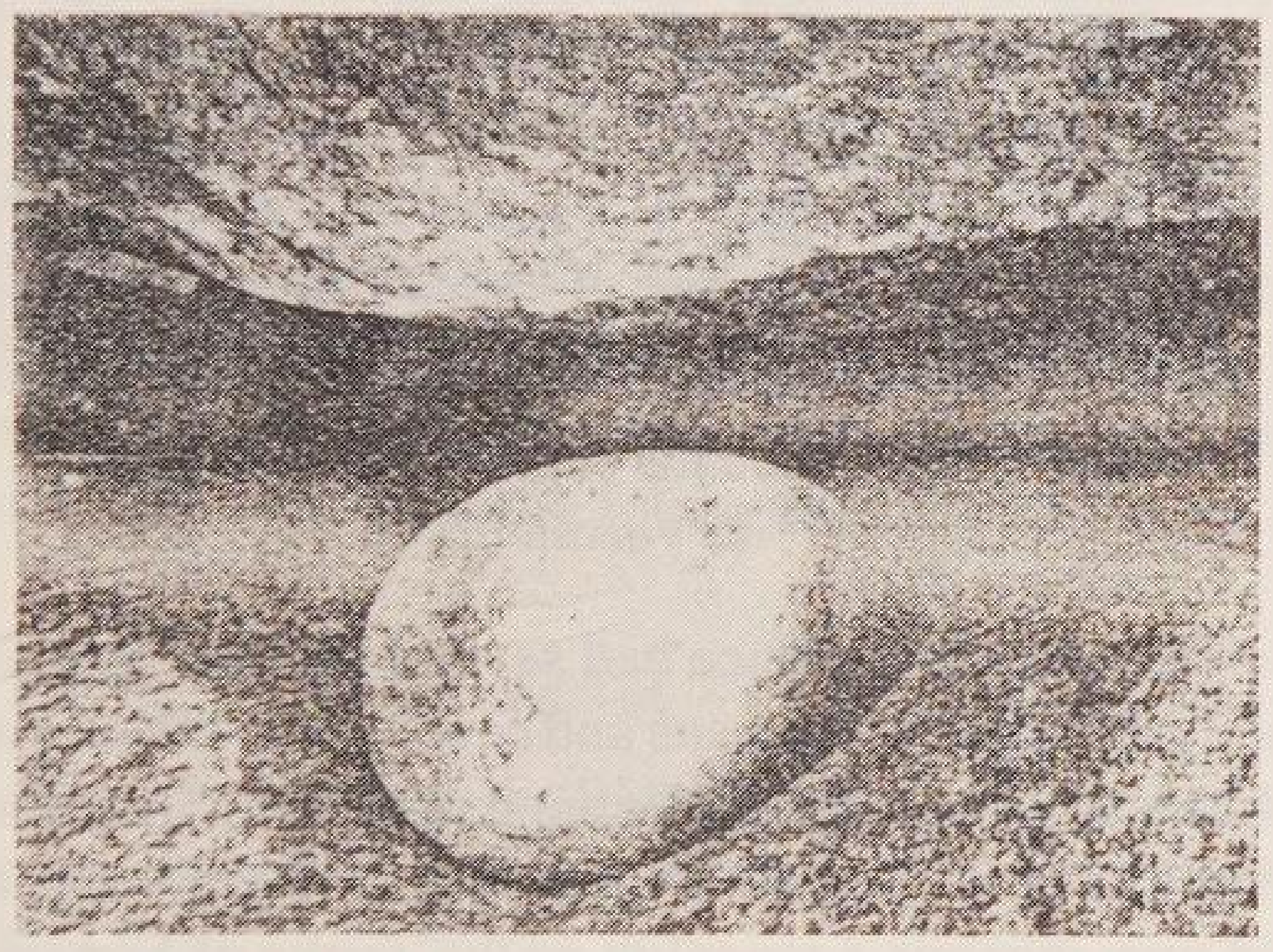

Fig. 2. Dumb cup and muller on base rock, Bolhai's kitchen.

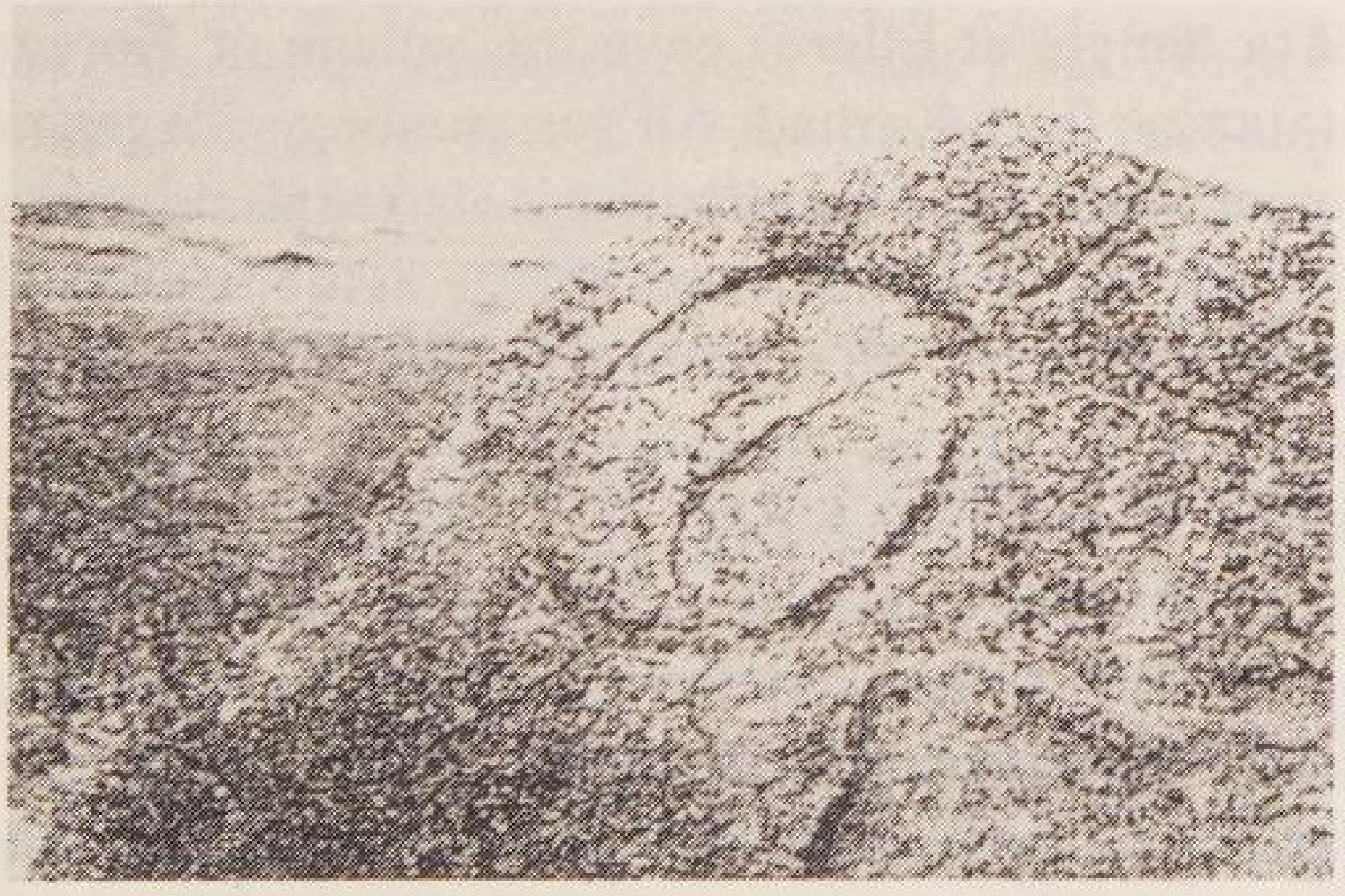

Fig. 3. Nearly perfect circle on peripheral rock at Theur.

have been avoided by the simple device of using a taut string for radius. A third such goddess is the Mandhrai of Varvand, in a natural hollow under a heavy capstone (Fig. 4). The two latter sites have fewer microliths than Bolhai. Varvand High Place had several prehistoric cults, to judge from the hollowed arches, dolmens and ovals scattered over its hundred-foot length, not to speak of the adjoining megaliths. The names Bolhai and Mandhrai have no acceptable meaning or etymology, nor has the Borzai who now inhabits a megalith as the Tyche of Sonori.

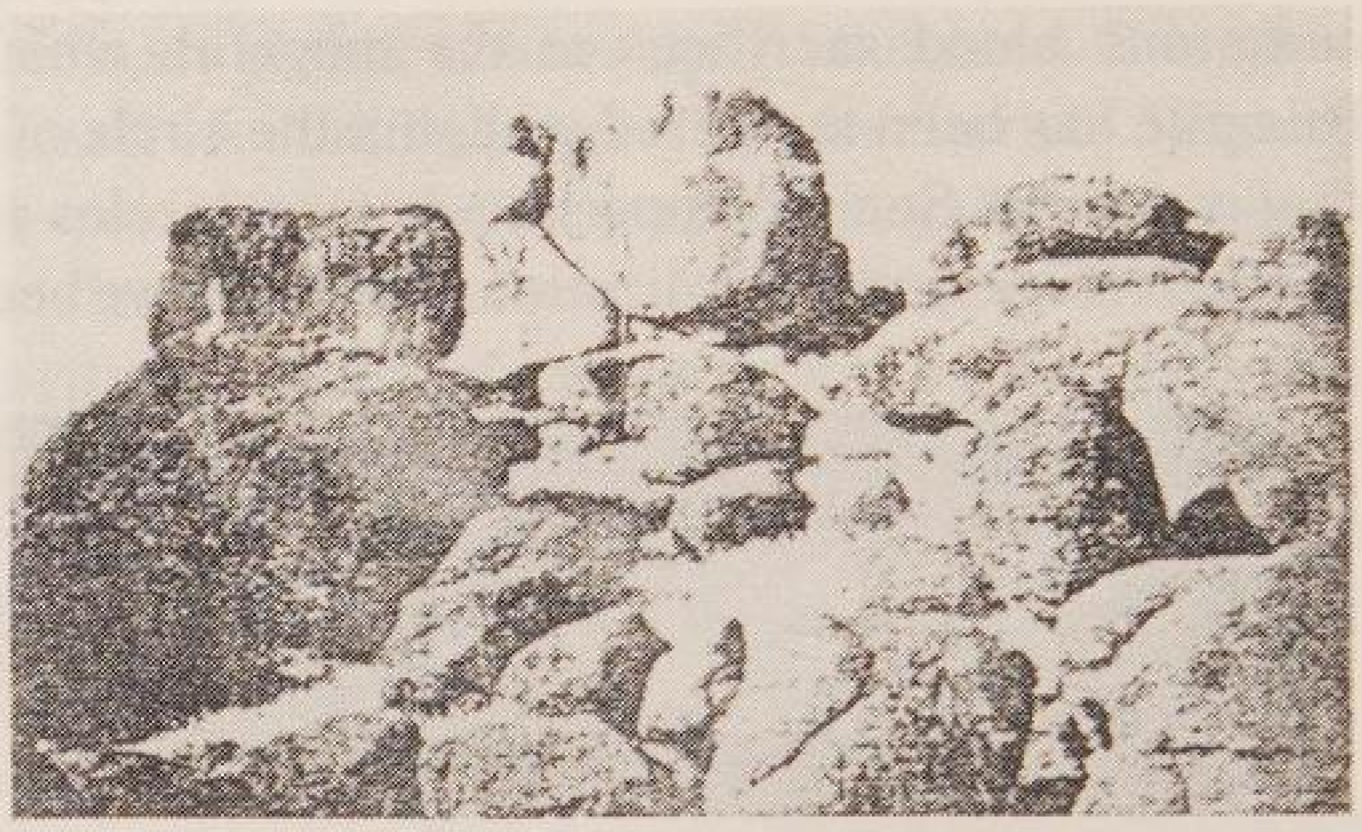

Fig. 4. Natural outcrop converted into megalith
at Varvand.

The region about Theur was settled[4] well before 13 March, AD 768, when the Rashtrakuta king Krishna I (famous for the construction of the great Kailasa temple at Ellora) gave the village of Koregaon-on-the-Mula to Brahmins from Karhad. All surrounding villages named in the grant still exist, while the Poona district is also explicitly named. Change from food-gathering to agricultural village settlement in Maharashtra dates from the middle of the sixth century BC. Iron seems to have been introduced from the north, presumably at the beginning of the first millennium BC or later. The Karle caves, with early woodwork dated at 280 BC by radiocarbon analysis, prove the widespread use of iron, profitable overseas trade, and the existence of local villages under plough agriculture—not later than 300 BC. Bolhai, which lies demonstrably at the junction of the prehistoric track, was a great megalithic complex before the Iron Age. On the other hand, the villages did not always occupy the same position throughout their existence. For example, Alandi near Theur came down from a location high up the hill, a couple of centuries before the Rashtrakuta land-grant. An adjacent village mentioned in that grant could not have received its name (Dadima, now Dalimb) before the

Kushan period (first–third centuries AD), for that name means 'pomegranate', a fruit not of Indian origin. The descent of agricultural settlements from the dry uplands occurred in several waves and was made possible by pastoral immigration. The cattlemen brought a male god, Mhatoba, with them; their descendants continue the worship. One such Mhatoba is located in the suburbs of Poona city, at the hilltop junction of Kotharud and Pashan villages. As patron deity of the former village (now over two miles away in the valley) he enjoys a considerable prestige; the track of his migration can be traced for about 30 miles through local tradition. The boulder representing the god is actually part of a demolished megalith, the rest of which has been broken up for the rude enclosure. Stones with the characteristic graven lines have been re-used for some of the 50 or so low cairns in soft soil immediately to the north-east of this Mhatoba. It is clear that the megaliths had been forgotten for centuries before agriculture developed in the Poona region by the final, viable fusion of cattle-herders with food-gathering tribesmen.

NOTES

1. Numerous reports in *Ancient India* [Bulletin of the Archaeological Survey of India] cover this field; in particular, a survey by K.R. Srinivasan and N. R. Banerjee in No. 9 (1953), pp. 103–15.
2. R.E.M. Wheeler, 'Brahmagiri and Chandravalli, 1947', *Ancient India*, No. 4 (1948), pp. 180–310. The dating is presented on p. 300. [This picture has changed considerably now, through sustained excavations.]
3. H.D. Sankalia, 'Megalithic Monuments Near Poona', *Bull. Deccan Coll. Res. Inst.*, vol. I (1939–40), pp. 178–84; vol. II (1940–41), p. 184. The Munjaba shrine was built by people still living, another 'dolmen' two or three years before the learned author visited the site; a vertical slab described (with photograph) as a 'menhir' was erected to guard the corner of a nineteenth-century brick house from the wheels of passing village carts.
4. Sten Konow on the Talegaon (Dhamdhere) copper plates of Krishnaraja I, *śaka* year 690, in *Epigraphia Indica*, vol. XIII, pp. 275–82.

25

Prehistoric Rock Engravings Near Poona*

The engravings in question lie on Vetal hill, named after a primitive cult to the west of Poona city's municipal limits. This shrine is located on sheet 47-F/14 of the Survey of India (1 inch = 1 mile) maps, close to a triangulation station at Long 73, 49´E, Lat. 18, 31´, 33´´N., height 2,365 feet above sea level. The photographs shown here refer to a small group of rock engravings 600 yards to the south-east and a more extensive lot about the same distance due north, from the triangulation mark. The former group was damaged by handquarrying for blocks, while the latter is being blasted away steadily for rubble. A few intermediate rocks show traces of prehistoric figures, as do the marginal rocks on a plateau 1,000 yards due west. A set of over 50 cairns 2,300 yards west by south probably represents a necropolis which re-used some engraved boulders; this point may soon be settled by excavation.

No local tradition survives about the people who carved the lines, or about the marks themselves. Older villagers maintain that the plateau was occupied at one time by pastoral (*gavali*) migrants from the north who did not use the plough.

The exposed basalt bedrock on which the engravings (except for one on a small boulder) occur is covered with lichens or a thin film of dead fungus which makes it difficult to photograph the lines. In the absence of apparatus for special lighting, chalk had to be used. The grooves sometimes reach a depth of two centimetres (e.g. Fig. 2), show no tool marks and are rubbed smooth to a semi-circular cross-section. The telescope used for scale is 47 centimetres long.

The pit that generally marks the centre of a circle (or a set of concentric circles) seems to be the matrix of an imbedded chalcedony nodule. Such

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**Man* (April, 1963), note 60.

a nodule is still *in situ* in Fig. 3, though fractured. These circles might lead to the stylized 'conch' and 'labyrinth' linear decorations sometimes painted on modern Hindu temples. Modern efforts on the hill do not go beyond scratching names or initials on the bedrock with a sharp stone, or figures which look primitive enough but disappear after one season's rain. Two parallel rows of shallow pits, found on one exposed bit of rock far away from these sites, indicate a gaming board used by herdsmen who had their annual monsoon grazing camp at or near the site.

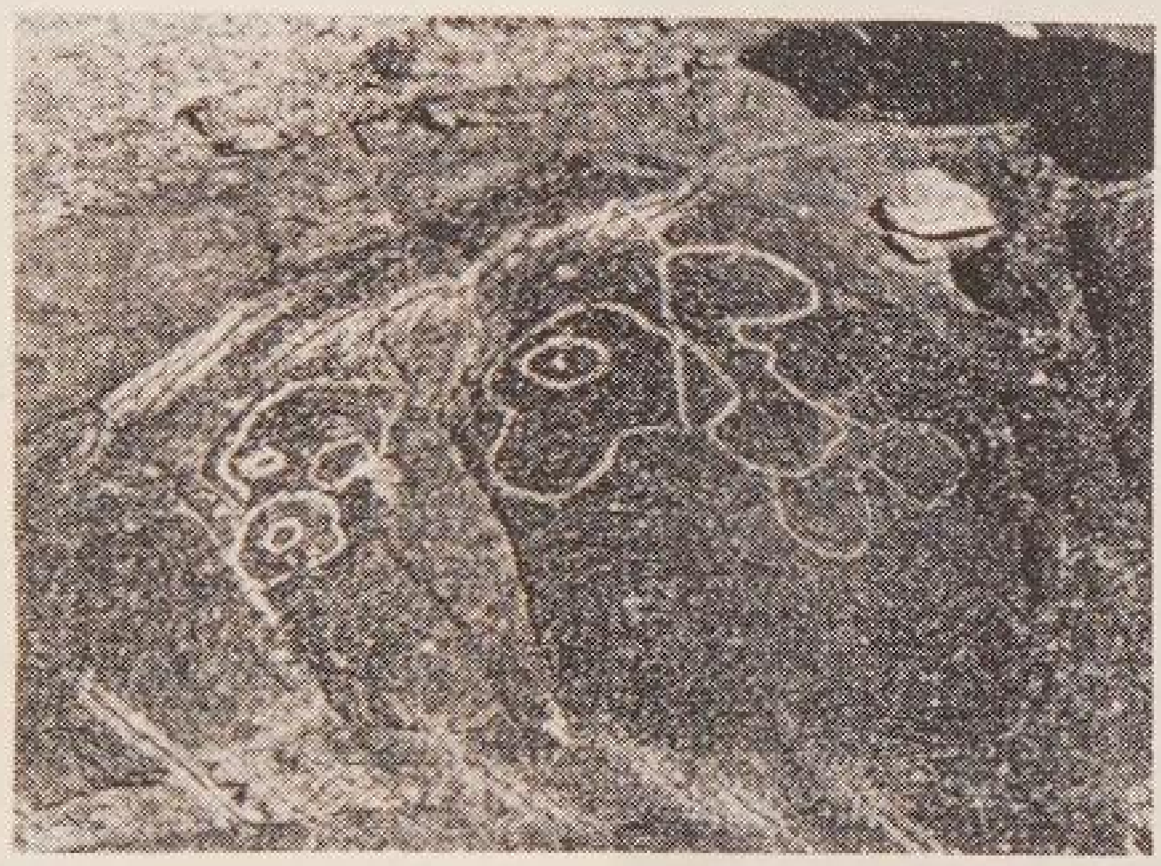

Fig. 1. Engraved rock near Poona (second group).

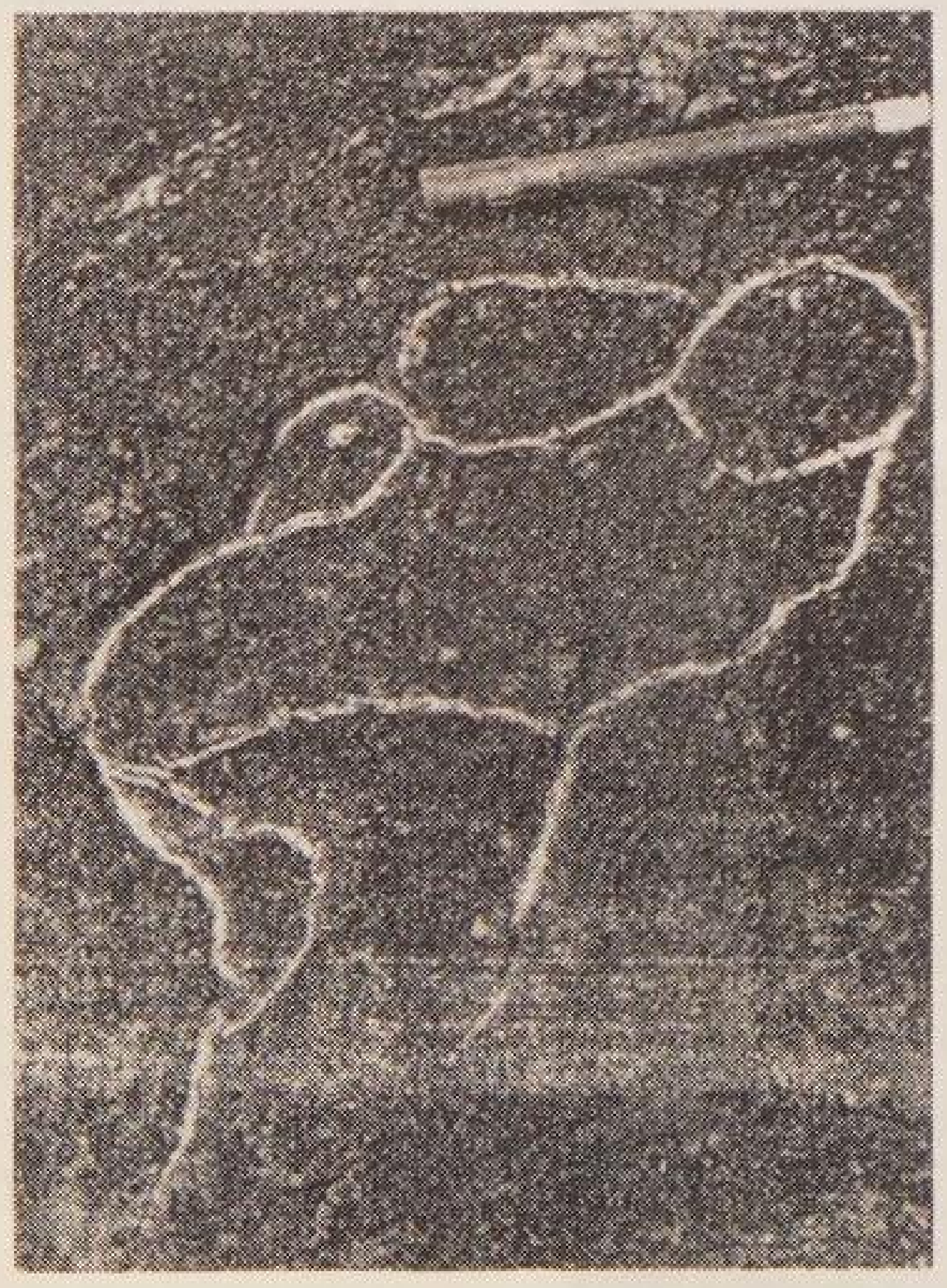

Fig. 2. Engraved rock in first group.

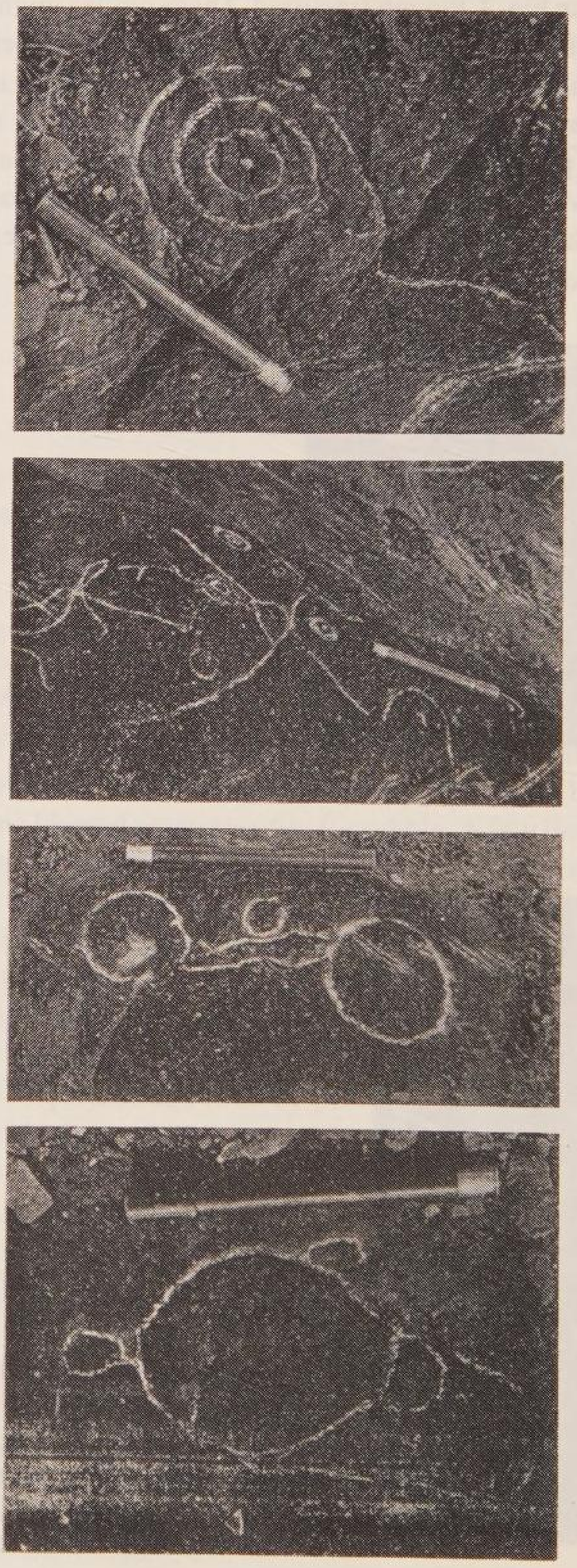

Fig. 3. Engraved rocks in second group. *At top, note fractured chalcedony nodule still embedded at centre.*

26

Staple 'Grains' in the Western Deccan*

The oldest surviving text (five–third century BC) of the Pali Buddhist canon reports an argument between two ascetics (*Sutta-Nipata* 239–52, the *Ama-gandha-sutta*). The more austere censures the other for living as an almsman, begging food cooked by others, when it would be more righteous to subsist by pure (vegetarian) food-gathering in the wilderness. That the earliest Indian monks represent an attempted reversion to food-gathering is beyond any doubt. Two of the three wild products (*Panicum frumentaceum* and *Phascolus mungo*) named in the opening stanza are now regularly cultivated. Both products appear in the extraordinary range of 'cereals' (*dhanya*) and 'subsidiary cereals' (*upadhanya*) eaten by the Marathi-speaking peasant. Though the Deccan plateau is not so rich in vegetation as other parts of India, it will be seen that the 44 varieties reported run through the entire spectrum from agriculture to food-gathering, as far as storage grains are concerned. There are proverbially supposed to be 18 varieties in each group, but the number in the latter class exceeds 18 and sometimes overlaps the former—a natural concomitant of variation in food-gathering for different localities. Important cultivated supplements to the diet, such as onions and potatoes, do not appear in either list; maize is a comparatively recent foreign import not yet popular enough to appear in the major cultivated group.

Dhanya: (1) Wheat. (2) Rice. (3) *Cytisus cajan* (*tura*, a pulse). (4) Barley (*java*). (5) *Holcus sorghum* (*jondhala*). (6) Pea (*vatana*), here to be used dried; of course, it is eaten fresh and green as a vegetable as well, in curries and with rice. (7) *Lithyrus sativus* (*lamka*). (8) *Cicer arietinum*, the gram known as *cana*. (9) Linseed (*javasa*). (10) Lentil (*masura*); again, mostly used to supplement rice, or *bajari*, like most other

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**Man* (August, 1963), note 156.

legumes. (11) *Phaseolus mungo* (*muga*; there is sometimes confusion between this and P. *radiatus*). (12) *Panicum italicum* (*rala*). (13) Sesamum (*tila*; the most important source of food oil). (14) *Paspalum frumentaceum* (*harika*, or *kodru*; virtually a weed in rice plots, semi-wild). (15) *Glycine tomentosa*, the vetch called *kulitha*. (16) *Panicum frumentaceum* (*sava*). (17) *Phaseolus radiatus* (*udida*). (18) *The bean Dolichos catjang* (*cavali*) or *D. Sesquipedalis*.

Among the *upadhanya*, semi-wild and less regularly cultivated, come: (19) *Holcus spicatus* (*bajari*, or *sajagura*; there is some confusion here about the latter). (20) *Panicum picosum* (*bhadali*). (21) *Coix barbata* (*vari*). (22) *Eleusine coracana* (*nacani*). This, like the preceding, is staple food in the backlands. It can be planted by digging stick, without the plough, as can most of the *upadhanya* list. Slash-and-burn (swidden) methods are generally used when it is planted in forest areas, but *vari* is an upland grain, while nacani is cultivated where the rainfall is better. (23) *Baraga*; the millet *Panicum miliaceum*. (24) *Khapale-gahu*, a variety of wheat with indurated glumes that have to be pounded off. Here, it should be noticed that *Phaseolus mungo, Phaseolus radiatus* and *Panicum picosum* also occur in some *upadhanya* lists. (25) Maize (*maka*). (26) Safflower (*karadai*; an important source of edible oil). (27) *Amaranthus pendulus*, (*rajagira*). (28) *Phaseolus aconitifolius* (*mataki*; with *hulaga* below, this counts as the lowest element of peasant diet in times not actually those of famine). (29) *vala* (*Dolichos spicatus*, but the name seems to be used for several similar beans). (30) Wild rice to be had without cultivation from a few swampy areas around the margin of ponds. This has the special name *deva-bhata*, 'rice of the gods.' (31) *Hordeum hexastichum* (*satu*). (32) *Hibiscus cannabinum*, the frog-plum *ambadi*. (33) The edible mustard *siras*. (34) Cumin seed (*jira*). (35) *Trigonella faenugraecum* (*methi*). (36) Bamboo seed. (37) Lotus seed. (38) The rice-weed *Clypea burmami* (*pakada*). (39) The dried seeds of *Hibiscus esculentus* (*bhendi*) which is also eaten as a fresh vegetable. (40) *Dolichos fabaeformis* (*govari*, oftener eaten fresh as a vegetable). (41) Seeds of *Echites antidysenterica* (*kudyace bija*) rarely eaten as food except in case of great need, but often used for stomach trouble. (42) *Dolichos biflorus* (*hulaga*); this is the favourite low-grade staple on the Deccan plateau section of Maharashtra. (43) Poppy seed (*khaskhas*). (44) White *rala*, a rare variety of (12) above; probably used for fast days, when the major staples are banned.

This list does not take into account the vegetables that grow wild or semi-wild. These grains are often used in rotation of crops. For example, the leguminous additions are generally planted in seed beds of paddy rice after the seedlings have been transplanted; thus, they renew the soil. For hillside slash-and-burn, the method is to plant *nacani* for one or at most two consecutive years; then *sava* or *rala* the next year and then fallow for eight years to allow the scrub to grow again. The immense variety, the obvious transition from food-gathering to cultivation and the method whereby meat-eating is almost entirely avoided by a balanced diet are signficant. In the better-forested regions, many of these minor staples can be gathered wild. The list of edible forest products normally known to the local inhabitants goes to nearly 200 for the Konkan forests. This includes fruit, berries, leaves and mushrooms, but not wild game, honey and the like, nor the coconut upon which the entire west-coast economy depends. The most primitive of forest dwellers eat snakes, lizards, mice, monkeys and some insects as well, whenever available. Fish is no longer plentiful, except on the western coast; even there, rather costly except at certain seasons, when it is dried and salted. River fish was a most important part of the diet in the Deccan stone-age days, so that the continuity or lack of continuity depends to a great extent upon ecological changes brought about by man. Deforestation has caused rivers to be silted up and the water to vary rapidly from flood to drought in the streams, hence the poor fishing.

It would be rather difficult to trace the historical development of these food grains and their geographical spread, but this note may provide a basis for future investigation. We should have been in a better position had the Greek observers who came to India with Alexander reported in greater detail upon the diet of the *hylobioi*.

27

Dhenukākaṭa*

The main purpose of this note is to give the text and a translation of all known inscriptions from the caves (dated on palaeographic grounds to between 150 BC and AD 150 with later additions at Kārle) at Śelārvāḍī, Beḍsā, Bhājā, and Kārle. This seemed necessary because all the epigraphs are not available in any one source, and also because of serious mistakes in earlier publications. Inscription 21 at Kārle seems to have escaped notice altogether, while the sphinx (see plate) is unique in its own way. Some of the inscriptions at Kārle, for example, have been placed on the wrong pillar. There is also an occasional flaw, not to be attributed to a misprint, in the published readings, such as Aseka for Asoka (in Kārle 19 below). The original publications relied upon estampages read patiently by distinguished scholars in such far-away places as Paris, Delhi and Ootacamund; here, these readings have been followed as far as possible, after comparison with the original graven letters, which are sometimes clearer on the rock than in the paper impression. The inscriptions naturally raise some important questions which have to be answered, or reopened. These questions are considered first, primarily on the basis of field work, and the inscriptions themselves given in the final section, with the minimum comparison, discussion or comment.

1. *The Name Māvaḷ*

This is used today for the *tāluqā* which includes Bhājā, Kārle, and Śelārvāḍī, which lie in the Indrāyaṇī valley while the Beḍsā caves overlook the adjoining Paunā valley and are therefore located in the Paun Māvaḷ. The two valleys—though not the rivers—meet just beyond the hill containing

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*[*Journal of the Bombay Branch of the Royal Asiatic Society*, vol. 30, 1955 [1957], pp. 50–71.

the caves at Śelārvāḍī (near the present Begaḍevāḍi station on the Central Railway).

Māvaḷ has been (rather fancifully) derived from the Marāṭhī verb for the setting of the sun and other heavenly bodies, as 'the region where the sun sets'. If so, this ought to have applied to the whole strip along the top of the Western Ghāṭs. It seems all the more ridiculous because the Māvalā is to the east of the most heavily populated section of Mahārāṣṭra, the Koṅkaṇ coastal strip.

Actually, the name is mentioned twice in the great Sātavāhana inscription on the Kārle Caitya façade (Kārle 30). The words are Māmāḍe (or Māmāḷe) and Māmālā-hāra. The 'province of Māmālā' is clearly the meaning of the latter. The name itself would be pronounced Māvlā.

The basic word still exists, and is reflected in the general worship of Māvalā-devī in these two *tāluqās*. Māvalā is the plural of *maūli*, 'little mother'; in fact this cult always shows worship of the goddesses in the plural, the number being indeterminate. the plural goddesses are also indicated by a translation compound: Māvalāyā. Their one peculiarity is that they must be near water, for wetting the aniconic images is the main rite of their worship. As such, one finds them on the ghāṭ near Kāmsheṭ station on the Indrāyaṇī, inside most wells of the feudal period, and by the side of the large water reservoirs as at Taḷegāo, Navalākh Umbare, Muṇḍhavare, and so on. The cult fades away towards the borders of the Māvaḷ, proper, and is equated to the *sātī Āsarā* = 'The Seven Apsaras' at Chinchvaḍ, Poona, and adjacent regions. Its persistence is important, as one is thereby encouraged to look for other survivals.

2. *The Trade Routes*

The caves were located where they are because the trade-routes passed by, and the larger complexes are invariably near the junctions of such routes. We know from the *Periplus* and Ptolemy's geographical account that the trade ports lay on the west coast, generally as far up the creeks and estuaries as navigation permitted. The best known, within the range relevant for the Māvaḷ caves are Broach (Barygaza, Bhārukaccha), Sopārā (Sophir, Ophir), Kalyāṇ (Kalliena) and Chaul (Semylla, Cheūl); with these should be bracketed the creeks and estuaries of Thāṇā, Panval, Revās-Dharamtar. The coastal region, however, was densely wooded and did not produce much for exchange, except salt, before the development of extensive coconut plantations. The coconut trees, though the most striking feature of the west coast today, are nowhere mentioned in the two Graeco-Roman accounts above.

Under the circumstances, the main problem at the time the caves were first carved out of the rock was to find routes up the ghāṭs to the Deccan plateau. All the passes (Pimprī, Savāsaṇī, Karsambḷā, Harnoli, Sāvā, Kurvaṇḍā, Borghāṭ, Ḍhāk, Kusūr, etc.,) are difficult, and many of them involve crossing or going around further ranges of hills on the plateau after the main ascent has been completed. However, the routes themselves can be traced with some certainty because of the lesser caves, not generally known, which mark adjacent hillsides. Thus, one feeder route went right along the foot of the Western Ghāṭs, and reached Junnar via Nāṇeghāṭ. This is marked by a line of caves such as at Hāḷ, Ambivale, Pālu-Sonāvḷe (adjacent to the foot of Nāṇeghāṭ), and elsewhere. Branches led up every valley. One branch might have climbed the Sāvā pass or the Kurvaṇḍā pass nearer Loṇāvaḷā, to go past Beḍsā. Another came up the valley to Khaṇḍāḷā, as is proved by the Koṇḍāṇe caves, and the much smaller caves on the opposite hillside above Central Railway tunnel No. 16, on a saddle-back overlooking both valleys. The other branch of the same valley leading up from Karjat terminates behind the village of Sāṇḍshī, above which there is again a large cave, which presumably marks an abandoned-route on the other side of Rājmāchī fort.

One old route skirted the hills past the foot of Kārle caves through Navalākh Umbare, and past Chākaṇ to merge into southern trade route to Junnar. One branch went past the hill ranges of Lohogad and Bhājā, along the other side of the valley. The outer defences of Lohogad fort enclose some ancient caves, originally monastic cells and assembly halls, converted into granaries and store-houses. The obvious reason for the caves is the existence of another saddle-back pass here into the Paunā valley. The old route on the Kārle side is marked by little-known caves such as at Shelatane. The Kārle-Śelārvāḍī line of caves passes through Bāṇere, the unfinished caves at Catushringi, and better ones behind the Fergusson College. Other routes besides those to the Māvaḷ are also to be traced by their own line of caves, as for example from Kuḍā on Rājpurī creek, via Koḷ and Mahāḍ, past Shirval and so to the east. This route is connected to the northern by a track along the base of the towering and sheer Deccan scarp. Only two of the numerous intermediate passes mentioned are, or could formerly have been, passable for pack animals. Both of these are again marked by caves not recorded on the maps or in the Gazetteers. The unique importance of Nāṇeghāṭ derives from two exceptional advantages. First, more than half the climb is on a tolerably easy gradient, while the rest is no worse than the best of the other passes. Second, after completing the ascent, the caravan would immediately find itself in a comparatively broad, cultivated, and fertile valley not barred by further mountain chains. This accounts for the size and antiquity of Junnar as well.

The forts (such as Korīgaḍ, Rājmāchī, Lohogad, Visāpūr) are all much later, built during the feudal period with the clear intention of collecting tolls on the trade routes and passes. These need not be discussed now, for our main purpose is to identify places named in the inscriptions.

This intimate association with the trade routes naturally raises a fundamental question: To what extent did the monks and their monasteries participate directly in the trade? By this is meant the commerce of the great caravans, and not such late, degenerate practices as the sale of relics. Archaeological evidence points very clearly to the monastic possession of great wealth in addition to that lavished upon their construction. Monks, nuns, and preachers of the Law have signed rich gifts, though primitive *Vinaya* rules forbade possession of all property. The cells were clearly provided with substantial wooden doors whose purpose was not privacy but the protection of valuables. Such doors (replaced in modern times) may still be seen at the Gaṇesh Leṇā, Junnar. Occasionally, a large hole cut through the partition into an adjoining room shows that one of the pair was used as a treasury, and access to it shut off except through the neighbouring cell, which would always be occupied.

In any case, the documentary evidence exists at the other end of the Buddhist world, in Chinese records and translations (*cf.* J. Gernet: *Les aspects économiques du bouddhisme dans la société chinoise du V^e^ au VI^e^ siècle*—Saigon, 1956; especially pp. 149–62 for India, and to 190 for Chinese practices). The active Mūlasarvāstivādins, and the Mahāsāṃghikas who dominated Kārle quietly modified the *Vinaya* rules without deviating from the letter. Contact with gold, silver, jewels and such precious commodities was avoided by using an intermediary servant *upāsaka* for the manipulation, or in extreme cases by insulation with a piece of cloth! These two Orders further deposited the bulk of the donated wealth with the *saṃgha*'s treasurer, who not only bartered the gifts, permissibly used the money for repairs to the dwellings, but directly contravened the original rules by using the funds also for the purchase of necessities (such as food) that should have been obtained by begging, and for the robes that should have been pieced together from discarded rags. The Nāsik inscriptions state that Uṣavadāta—whose generosity figures also at Kārle—gave 'everlasting' donations (*akṣaya-nīvi*) to the *saṃgha* in the form of money deposited with various guilds which was never to be repaid, but whose interest was to be used forever to supply necessities, including a viaticum, for the monks who spent the monsoon in the caves. The Mahāsāṃghikas invested their money by letting it out at interest and their *Vinaya* (in Chinese translation) shows that the monks themselves managed such transactions, whereas most other sects left them to the external donors. The seventh-century Chinese pilgrim I-tsing noted that the robes of the almsmen were purchased from the interest of the perpetual *akṣaya-nīvi* deposit, or the surplus harvest of fields and gardens, or the interest yielded by the fruits of the orchards. Not only the art but the organisation and economic management of Chinese Buddhist monasteries, especially the cave-monasteries such as Tun Huan and Yuen Kang (Ta-tung), were initially copied from Indian models, so that their records can be utilized for our purpose.

Certainly, the yield of the villages assigned to the caves was not all used up for the monks who were in residence during the rainy season. It would be extraordinary if some of the grain were not sold to the caravans that began to pass by soon after the harvest. It is known that surplus flowers from monastic gardens were sold to professional *mālākāras* who—to judge from their donations—must have profited heavily from the sale of garlands (for floral offerings) to pilgrims. That all other donors were interested merely in the spiritual merit gained and had no interest in or profit from the accumulated wealth of the *vihāra* would be incredible. It is not to be expected that our caves played the same role with respect to the caravans as the Central Asian Buddhist monasteries, which acted as great *sarāis* and supply depots as well as the actual trade headquarters. But the cave-monasteries with their increasing concentration of wealth must have been of considerable importance in the economic development of the Sātavāhana kingdom. It may be suggested that the unusually heavy incidence of tiny low-grade coins of copper, pewter, billon, and lead in the Sātavāhana Deccan must have had something to do with the fact that the handling of such coins was a trifling, venial sin for Buddhist monks. To what extent this special economic relationship to trade led the practical modification of the ancient discipline rules needs further study.

3. *Minor Identifications*

A question connected with the trade routes is that of Tagara, a great Deccan trade city mentioned by the *Periplus* (51 = Schoff p. 43, 196) and by Ptolemy (82 = McCrindle pp. 175–8). This has been variously identified with Junnar (Bombay Gazetteer 16. pr. 3 p. 181), Dharur, Ter (95 miles SSE. E. from Paithan; J. F. Fleet *JRAS*, 1901. 537–52), and several other places. The name Tagara-pura and Tagara-nagara is found (Fleet, *loc. cit.*) in inscriptions from the early seventh century onwards, without helping locate the city.

The identification with Ter is purely on philological grounds. The published argument for Junnar is almost as feeble, namely that *togara* derives from *trigiri*, the three mountains about Junnar. A fundamental point hitherto neglected is that any identification other than with Junnar would lead to the conclusion that the Graeco-Roman traders from whose accounts both the *Periplus* and Ptolemy drew their main information did not see fit to mention the greatest Deccan trade centre of that time. Over 135 caves (apart from those which have been effaced by crumbling of the weathered basalt) are scattered on the Mānmoḍī (old *māna-mukaḍa*), Shivneri, and Suleiman (Gaṇesh Leṇā) hills, around Junnar. Although the main roads and railways have now bypassed Junnar completely and caused the city's decline, it still remains a considerable city. An impressive number of pack-animals, loaded with panniers or saddle-bags on horned pack-saddles, still make their way over the steep, perilously smooth, worn steps of Nāṇeghāṭ seventeen miles away, carrying goods exactly as was done two thousand years ago between Junnar and the coastal strip. The traffic density is greatest on Mondays, when pack-trains from the Sunday *bazār* at Junnar, mostly laden with onions and potatotes, pass down the ghāṭ for exchange against the coastal *varī* grain.

The Russian traveller, Afanasii Nikitin, spent a rainy season at Junnar about AD 1470. His vague and rather insipid narrative hardly helps the route to be identified: From Chivil (Chaul) to 'Pilee' near the mountains in eight days; thence to 'Oomree' in ten days, and thence to Junnar (Jooneer) in six more. 'Pilee' has been tentatively identified by the translator with Pali near Nagothāṇā, 'Oomree' with Umbare Navalākh, presumably reached via the Pimprī pass, across what is now Mulshi lake, past Śelārvāḍī. But the number of travel days do not fit. If the account be taken literally, Nikitin's caravan must have dawdled to Pali, made fair time to Umbare, and positively raced to Junnar! It might be noted that Pali and Umbare are very common village names in the region under consideration. The Russian must have gone via Nāṇeghāṭ, for he describes Junnar as standing 'on a stone island'. The fearful pass whose ascent took a whole day, left a profound impression upon him (p. 10, Major's collection), which would have been more unlikely for the Pimprī-Navalākh Umbare route. In other words, Nikitin also followed the ancient trade route, presumably past Hāḷ, Palasdari, Dahivli (Karjat), Ambivale, Narivli, Dhasai-Vaiśākhare and then up Nāṇeghāṭ.

The etymology of the name Junnar need cause no difficulties. It is obviously a contraction of *jīrṇa-nagara*, 'the old city', in its Prakrit form. Otur to the north, reached from the coast by a pass near Harischandragarh (also marked by caves!) is surely derived from *uttara-pura*, the northern city. Thus, the name Junnar need not incorporate *tagara*. The local cave inscriptions seem to refer to it simply as *nagara* = the city. Greeks (L. 1154, 1156, 1182) and Śakas (L. 1148–9, 1162) have recorded their donations, as also have people from Kalyāṇ (L. 1177, 1179), Bhārukaccha (L. 1169) and other places equally distant.

To return to the Māvaḷ caves: I suggest that the Dhaṃmutariya (Dharmottarīya) sect mentioned there was prominently associated with Dharamtar. Actually, the two citations (Kārle 12–13) are by a preacher from Sopārā. The sect is also mentioned once at Junnar (L. 1152). It is an offshoot of the *Vacchi-putrakas*, (Renou-Filliozat: *L'Inde Classique* II, section 2317). The school was local, and is not placed except by these cave-inscriptions. The literal meaning of *Dharam-tar* = 'religious ferry' hardly makes sense, as the place has no religious significance now. But it lies up an excellent navigable creek, and 'entrepot of the Dharmottarīyas' would be a reasonable origin for its present name. The principal Order at Kārle seems to have enjoyed the title Mahāsāṃghikas (*cf.* Kārle nos. 1 and 30), so that the Dharmottarīyas were based upon some place other than Kārle.

The title *mahārathi* or °*thi* occurs several times in these and other contemporary epigraphs. I propose to interpret it as the title attached to a proto-feudal office which was often inherited in the direct line; the main function of the person so designated would be to collect the revenues of a whole district or province for the king. This would mean control over a considerable armed force, judiciary powers to settle disputes arising from revenue assessment—the main burden upon the villages—and powers to alienate such revenues (*cf.* Kārle Nos. 8, 29, 30). So, the person would often be closely related to the royal family.

The arguments are as follows: Removing the adjective *mahā* = great, and ignoring the calligraphic difference of a dot between *ṭh* and *th*, we have to interpret *raṭhi*. This would seem to be the Prakrit equivalent of the Sanskrit *rāṣṭriya* (*cf.* Pali *raṭṭha* = *rāṣṭra*). Rāṣṭriya is actually reported as the title of Candragupta's legate, the *vaiśya* Puṣyagupta, in Rudradāman's Girnār inscription (AD 150; *EI*. 8.36 ff; L. 965). The title could not have been invented for the occasion by Rudradāman, but must have existed from Mauryan times or earlier. This *rāṣṭriya* began the great dam which was later completed by one of his successors; the *Yavana* rājā Tuṣāspha, Aśoka's governor. This shows the great powers and high prestige of the rāṣṭriya. The word can best be derived from *rāṣṭra*, which is the technical term used in the *Arthaśāstra* (2.15 *et passim*) for a large class of general taxes from sources other than crown lands and crown monopolies. Thus, the *rāṣṭriya* would be the collector of *rāṣṭra* taxes and the administrator for all related affairs. This would explain the *-raṭhi*, but the *mahāraṭhi* must—at least during the Māvaḷ cave period—have been closely related to the royal family. The large cave at the head of Nāṇeghat (L. 1113–18), shows remnants of a labelled set of reliefs, beginning with the founder of the Sātavāhana dynasty, the *rāyā* Simuka Sātavāhana *sirimat* (L. 1113), followed in order by Nāyanikā and her husband Siri-Sātakaṇi (L. 1114) who should presumably have been the ruling sovereign of that period. There is the prince (*kumāra*) Bhāya- (L. 1115) followed by the mahārathi *Tranaka*-yira (L. 1116), after whom come two more princes *kumāra* Hakusiri (L. 1117), and *kumāra* Sātavāhana. The cave was not a monastic retreat, but a public place for some official use, undoubtedly for the collection of tolls from caravans passing through Nāṇeghāṭ. The group of sculptured reliefs would then represent the founder and the actual court of the day. If the *mahārathi* could take precedence over princes of the blood royal except the crown-prince, a logical inference is that he was a senior member of the royal family. In fact, *rāṣṭrika* is given in the dictionaries as 'ruler of a kingdom'; and *rāṣṭriya* also with a supplementary meaning, 'the queen's brother', as in *Amarakośa* I.7.14. The Prakrit *raṭṭhiā* is used in this last sense in *Śākuntala* VI, where the all-important token ring, lost and recovered, seems as pleasing as the *raṭṭhiā's* face. The inscriptions cited for Kārle prove that the *mahāraṭhi* was also the provincial governor.

4. *Dhenukākaṭa*

This is more difficult, but important because so many of the donors in the Caitya cave are Dhenukākaṭans that the excavation seems today primarily a monument to their generosity. The wooden ceiling arches of the Caitya cave at Kārle, were covered with paintings; most of the pillar shafts, bearing traces of pigmented plaster, were also painted. How many of these were signed by donors' names now lost cannot be estimated, though signatures on Ajaṇṭā paintings make it most likely that the Māvaḷ caves also had such names. Possibly, photography with special colour filters might reveal a few even now. On the strength of what remains on the rock, there is no doubt that Dhenukākaṭa had a settlement of Greeks bearing Indian or Indianized names. Yavana here could also mean Persian, as for Tuṣāspha in Rudradāman's Girnar inscription. This is supported by the Iranian termination °*pharaṇa* for the names of the first donor and his father in Karle 1. But these two are not said to be from Dhenukākaṭa, and no such termination is associated with any Dhenukākaṭa name.

The question of the Yavanas is perhaps settled by a curious sculpture on the capital of the 13th pillar on the right, in the Caitya Cave. The pillars behind the great caitya are plain. On the side of the nave, all the remaining pillar capitals bear human couples on elephants. The side facing the aisles have—with two important exceptions—such couples on horses. The finish of all sculptures on the aisles is much rougher than on the nave. This is easily understood from the total absence of natural illumination on that side, while the open-wick oil lamps that have left visible deposits of soot would hardly suffice to bring out any real surface detail. On pillar 13 (under discussion), the horse facing the main entrance has been replaced by an animal that can only be called a Sphinx. This is unknown elsewhere in Indian iconography, but would bespeak powerful Greek influence. (The next best imitation is that of the centaurs on a tiny capital at the left of the most beautiful surviving cave at Bhājā, where the door-guards and the reliefs of the Sun-god and Indra attract all the attention.) The model was unmistakably a sphinx statuette. The long ear-flaps pendant from a tight head-dress on a human face might be mistaken for floppy ears. The front claws are clear, but the main body of the animal is concealed by the body of the horse. Moreover, the supports left in the rock, below the paws, make the figure look from the ground like a squatting human dwarf. The sphinx, which faces to the observer's left, is ridden by a man; the adjoining horse by a woman. She has her right arm around the man's shoulders while his left seems to caress her hips. Inasmuch as the donor calls himself a Yavana Dhama-dhaya from Dhenukākaṭa (Kārle 24), that settlement must have contained Greeks in trade contact with Alexandria, rather than Persians. Supporting evidence may be seen on right pillar 17 in the physician's name which I read Miḷiṃda = Menander. The script is somewhat later and the pillar is quite plain, which shows that the generosity, if not the wealth and glory, of Dhenukākaṭa was on the wane. Miḷiṃda, though from Dhenukākaṭa, does not call himself a Yavana; his wife and children bear Indian names. Of course, the pillar inscriptions show other traders and donors besides Greeks from Dhenukākaṭa. The right eleventh pillar was donated by the *vāniya-gāma* of Dhenukākaṭa, palaeographically the earliest record of a famous Indian institution, the *vaṇig-grāma*, or southern *maṇi-grāmaṃ*, whose remnants survive to this day in petty traders' guilds.

Dhenukākaṭa was first identified, purely on phonetic grounds, with Dhānyaghaṭaka, modern Dharaṇīkoṭā, at the mouth of the Kṛṣṇā river. This identification has long been abandoned by intelligent people, because there is no apparent reason why people from Dhenukākaṭa, Greeks or not, should march right across the peninsula and across the whole

Sātavāhana kingdom to concentrate their donations at Kārle (where the name occurs in 17 out of the 37 inscriptions) while nothing else is heard of them except once each at Śelārvāḍī (below) and Kaṇherī (cave 76 = B. 28, L. 1020), in the same trade-region.

It must be emphasized here that the special relationship of Dhenukākaṭa was not to the Kārle caves as such, but to the *caitya*, for all Dhenukākaṭa citations occur only in that one cave, and all but two on the pillars inside the great hall. The point about the sphinx is also worthy of elaboration. Sphinxes of a sort do occur on a Bharhut gateway (Cunningham, plate X). The two free sides of the capital of a miniature engaged column at Bhājā show dallying couples with human bodies from the waist up, and of some clawed animal from the waist down. These are sometimes labelled sphinxes, but much nearer to the classical centaurs. Along with the Aśokan 'Persepolitan' bell-capital and the winged lions above a Sāñcī gateway, such chimaeras are taken as evidence of the foreign influence that travelled along the land route through Gandhāra. The Kārle sphinx is unique; it was not clearly understood by the sculptor, who has retained the pedestal of the figurine in his model rather than put the hybrid down on the capital, like the addossed horse. This would imply that the tradition came directly from abroad, with the model, not via Gandhāra and Bharhut. For the rest, Indian iconography generally favours a human body with animal head (Gaṇeśa, Hayagrīva, etc.), so that a direct foreign stimulus (possibly, some centaur statuette imported from abroad, via Dhenukākaṭa or otherwise) might be responsible for the Bhājā capital also. Left pillar 11 of the Kārle Caitya may have another sphinx but not on a pedestal; the human face is disproportionately large, without ear-flaps, and the pillar unsigned hence useless for our purpose.

E. H. Johnston (*JRAS*. 1941. 208–13) proposed to identify Ptolemy's *Dounga* with the modern village of Doṃgrī on Salsete island opposite Bassein, and proposed further identification with Dhenukākaṭa. Though I accepted both, it now seems to me, after considerable deliberation and field-work, that the latter identification must be rejected, without any reference to the former. Johnston's arguments were as follows:

The geographer Ptolemy does not mention Kalyāṇ at all, though it was known to the *Periplus* a century earlier, and is very prominently referred to by Kosmas Indikopleustes some four centuries later. The *Periplus* remarks: '. . . Kalliena in the time of the elder Saraganus became a lawful market town; but since it came into the possession of Sandares the port is much obstructed, and Greek ships landing there may chance to be taken to Barygaza under guard.' This is taken as consequence of the conflict between the Sātavāhanas and the Western Kṣatrapas. Dounga which 'must have been somewhere on the island of Salsette' presumably replaced Kalyāṇ for a short time as an emporium for the Greeks. This is the reasoning for Doṃgrī. As for Dhenukā-kaṭa, *dhenu* would be corrupted by local pronunciation to *dheũ*, and *kaṭa* is equivalent to 'slope of a hill', hence again Doṃgrī—still according to Johnston.

Conflict between the Sātavāhanas and the Western Kṣatrapas is proved by the Nāsik inscription boasting of Gotamiputra's victory over Nahapāna, by Rudradāman's Girnar inscription, and by Kārle 30 which bestows Karajika village upon the monks without mentioning the previous gift of the identical village upon the same community by the Śaka Uṣabhadāta, Nahapāna's son-in-law. Johnston's deduction from the map that Doṃgrī was 'suitable as a terminus for traffic down the passes of the Ghāṭs' is doubtful. Any location on the various creeks from Thāṇā to Dharamtar would have been much better, apart from the fact that Doṃgrī traffic would lie as much through hostile territory as that through Kalyāṇ. However, our main objection is to the identification Dounga = Dhenukā-kaṭa, not to Dounga = Doṃgrī.

The former equation rests mainly upon the assumption that Dhenukā-kaṭa was a Greek settlement on the coast. I see no justification for this. A Greek donor at Nāsik (*EI*. 8.90–1) came from Dattāmitri (say Demetrias) in the north (*otarāha*). Inasmuch as there is no suggestion that Broach was Nahapāna's capital or even the site of his mint, the coins of that ruler bearing Greek legends must have been fabricated by foreign craftsmen who, presumably, had settled inland. Johnston's argument about *dheũ* is admissible without reference to distant Bihar, because the word still exists in Koṅkaṇi, even as a place-name. But the weak point is the loss of a syllable. The compound is not *dhenu* + kākaṭa but *dhenukā* + *kaṭa*. So the first member would become *dheũka*, the second *ka* might be softened into a vowel *a*, and perhaps lost by elision. In fact, the syncopated form Dhenukāṭa is actually found in Kārle No. 19 (Vats 12; left 13th pillar of Caitya), though treated as a scribe's mistake. But the local form of the name must have been within recognizable distance of *dheũkaḍa*. The transition from °*kaṭa* to °*kaḍa* is found at Śelārvāḍī.

The conditions of the problem now reduce to the following. We must look for a place which shows considerable antiquity, which had some special connection with the Kārle *caitya*, where an Indo-Greek settlement existed for a time, and whose name resembles *dheũkāḍ*. These are best met by the hamlet of Devagaḍ or Devaghar. It is at the opposite tip of the horseshoe curve of hills from Kārle and certainly lay on the old trade route. It is one of the few Māvaḷ villages to have an old water-reservoir hewn deep out of the rock. It contains an old ruined temple of Śaṃkara in the mortarless 'Hemāḍpantī' style which could not have been built after the thirteenth century AD, and is more likely to be of the eleventh century. This temple is undoubtedly responsible for the final change to the uncommon name Devghar = god's house, from Dheũkāḍa. The hillside behind the village has a large cave, without cells, which is much older. This cave seems to have been abandoned before completion because of water leaking into it through cracks—which would have made it uninhabitable at just the time the monks would really need it, the rainy season. Best of all, Devghar still maintains a special cult relation with the Kārle caves.

The only living cult at Kārle now is that of the goddess Yamāī at the entrance to the Caitya: she has a Sanskritized name *Ekavīrā*, variously supposed to be a daughter of Śiva, or Reṇukā, the mother of Paraśurāma. This high-sounding name is sometimes derived from the Kanarese Akkā Aveyyār. The *gurav* priests who perform the service call her simply *ambā-bāī* = 'Lady Mother', while the common name is *Veher-āi* = 'Mother-Goddess of the Caves'. She is still peculiarly related to the great Caitya, for offerings are made to both. Prayers for the birth of children addressed indirectly to the stūpa. Not the image, but the stūpa is circumambulated (clockwise, to the right) because the goddess's image is carved in relief from the hillside. Should a child be born in response to such a vow, the cradle is 'shown' to the stūpa rather than to the goddess. At every Koḷī family visit, the stūpa is worshipped with offerings, though otherwise the mother-goddess receives all the offerings, sacrifices and prayers. Her particular and most generous worshippers are the Koḷīs, fishermen and sailors from Bombay island (not to be confused with Koḷī tribesmen from the hills). They regard this particular Yamāī as their patron deity and family goddess though Yamāī images are known elsewhere: As for example, at the Beḍsā *vihāra* cave and in the hardly known cave at Bāṇere near Poona. It is these Koḷīs who have built the *dharmaśālās* near the caves and covered the goddess's shrine with silver plate. Most remarkable for our purpose is the fact that (for reasons no one can now explain) the great April *pālkhī* procession of the goddess starts (with all due ceremony) at Devghar and goes up to the goddess's shrine at the *caitya* entrance the next day, without visiting any other village, not even Vehergão at the foot of the caves. Yet, there is no Yamāī cult or image at Devghar. The Koḷīs have built an impressive temple of the village death-god Bhairava at Devghar a generation ago, and a *dharmaśālā* behind it. Private residences for individual Koḷīs, who use them only for a few days in the year, have also been built at Devghar and Malavali. The gathering under Koḷī sponsorship, of several thousand pilgrims and worshippers at Devghar for the initiation of the *pālkhī* leaves no doubt about the ancient connection between that village and the Kārle *caitya*, for no reason apparent today, but comprehensible if the village were once Dhenukākaṭa.

Nothing can now be said about a possible Greek settlement at Devghar (°gaḍ) without some excavation or at least dredging out the silted but undoubtedly deep tank. But the gift by a Dhenukākaṭan ploughman's wife and squire's mother at Śelārvāḍī (inscription 2) would be quite natural if Dhenukākaṭa were located as is suggested here. The possible identification of Dounga with Doṃgrī will not be affected, either way.

It is clear from the inscriptions and from the Sino-Buddhist evidence cited above that the intimate connection between the rich monastery at Kārle and the wealthy merchants' settlement Dhenukākaṭa had a solid economic foundation. The mercantile function of the monasteries was not only the purchase of cloth and other commodities for the monks and retainers, and the buying of costlier materials for ritual and ostentation, but also the supply (for profit) of essential provisions and the loan (at interest) of indispensable capital to the trade-caravans. The great market centres of the Sātavāhana Deccan were sparsely distributed; their interconnecting trade-routes passed through wild, thinly settled, and difficult country. The caves were located conveniently near the worst stage of the journey, originally because of the monastic love of seclusion and the obligatory monsoon Retreat. The monasteries were untaxed, and their possessions not in danger of arbitrary confiscation by kings or officials as might be the lay merchant's hoard. A secondary economic function, the charitable use of monastic grain for the relief of famine, scarcity, or individual distress among laymen gained them special reverence from the savage tribes and the earliest villagers. The sanctuary that would be given (in spite of certain *Vinaya* rules) even to robbers who wished to renounce their evil ways rendered these foundations the more immune to attack by brigands. It is only after village settlements using the heavy plough had become much denser that the same monasteries were transformed into a drain upon the revenues and the resources of the country, without mitigating features. By that time, it was much too late to reverse the trend towards degeneracy that had inevitably set in (under the guise of theological differences) with the gain of wealth and the taste for luxury.

The manifest association between Dhenukākaṭa and the *caitya*, as between the monks and the merchants, accounts for the continuity seen in that cave, in the execution of a fixed architectural design through the co-operation of many donors, over a period of several generations. The goddess Yamāī is surely derived from some prehistoric cult which preceded the caves, may have been the cause of the Kārle caves being located where they are, and which has survived the Buddhists. In support of this contention, one may point to the small hillock about 500 metres to the east of Devghar-Dhenukākaṭa. This bears a Bhairava shrine, and impressive rock-cut water-cisterns now neglected except for the usual red pigment spots representing Māvalā-devī. An unusual concentration cf carnelian microliths may be picked up at the foot of the hillock, which is thus proved to have been a prehistoric centre of exchange as well as a cult-spot, long before the Buddhists brought in trade at a much higher level of production. The Bombay Koḷīs would seem to carry on traditions formed by their ancestors in caravan days two thousand years ago, though unaware of this remote antiquity.

5. *The Inscriptions*

The standard publications are: Kārle: E. Senart, *Epigraphia Indica* 7.1912.47–74; referred to as *S*. with numbers. M.S. Vats, *ibid*; 18.325–9 as *V*. with number. These supplant G. Bühler's report in the *Arch. Survey Western India* Vol. IV, 1882; it is still useful for the other inscriptions. For Śelārvāḍī, the Caitya inscription was first cleared and reported by A.C. Ghosh in *EI*. 28.77.* For comprehensive references to that date, numbers are given from H. Lüder's *Index* (*EI*. 10, appendix), with code-letter L. *BI*. refers to J. Burgess and Bhagwanlal Indraji's *Inscriptions of the Cave Temples of Western India*, (Bombay). In what follows, the text is given in Roman, with doubtful letters italicized, and missing letters supplied in square brackets; the end of a line is indicated by the solidus. The *anusvāra* is usually uncertain. The decorative symbols such as the *svastika* etc. have been omitted. The text is followed by an English translation, and by bracketed notes or remarks on the text.

KĀRLE

The general order is from north to south, as far as possible.

1. North of Caitya cave, wall of 2nd cell from south, upstairs, of a vihāra (S. 20, L. 1106):

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*[The correct reference is: C.C. Dasgupta, 'Selarwadi Cave Inscription', *EI*. 28, pp. 76–7.]

Sidhaṃ Raño Vāsiṭhiputasa Siri-Puḷumāvisa savachare catuvise 24 Hemaṃtāna pakhe tatiye 3 divase bi-/-tiye 2 upāsakasa Harapharaṇasa Setapharaṇaputtasya Sov*a*sakasya Abulāmāya vathavasya ima deyadhaṃma maḍapo/navagabha Mahāsaghiyānaṃ parigaho saṃghe cātudise dine * mātā-pitunaṃ pujā savasatānaṃ hita-sugha-sthataye ekavise sa-/-vachare niṭhito sa*he*ta ca me puna Budharakhitena mātara casya ** upasi*kā*ya Budharakhitasa māt*u* deyadhaṃma pā*ṭho* a_ni_**.

Perfection! On the second 2 day of the third 3 fortnight of the winter season in the twenty-fourth 24 year of King Siri-Puḷumāvi, son of Vāsiṭhi; this hall with its nine cells is the pious gift of the lay-worshipper Harapharaṇa, son of Setapharaṇa, a Sovasaka from Abulāmā; to the universal (Buddhist) Order, (but) specially for the Mahāsāṃghikas, in worshipful memory of his parents. In the twenty-first year, again, by me Budharakhita along with his mother the lay-follower **, (was it) finished with a passage-way; (as) the pious gift of Budharakhita's mother.

2. Cistern, north of Caitya (S. 21; L. 1107):

*** 5 Hema*ṃ*tānaṃ pa*khe* * e **** ya puvāya bhaya*ṃ*ta / *** h*i*na atevāsiniṇa lenam bhagi *** kāṇa sadigā / *** kale pavāitāṇa Saṃghāya Bu *** dhaṃma poḍhi / **** / *** atevāsinihi.

{Badly worn, virtually illegible; commemorates the gift of that particular cistern and cave; donors may be as in Śelārvāḍī 1.}.

3. Lion pillar, front of Caitya cave (S. 2; L. 1088):

Mahārathisa Gotiputrasa Agimitraṇakasa sihathabho dānaṃ.

Of the Mahārathi Agimitranaka, son of Goti, (this) lion pillar (is) the gift. {Mahārathi is here a high official title, whether or not *Marāṭhā* is its etymological descendant}.

4. Verandah pillar in front of central door, Caitya cave (S. 5; L. 1091):

Gahatasa Mahādeva-/-ṇakasa mātu Bhāyilaya*ṃ* dānaṃ.

Gift of Bhāyilā, mother of the householder Mahādevaṇaka. {The doubtful reading might be Bhāyilāyā}.

5. Same pillar, below the preceding (S. 6; L. 1092):

Dhenukākaṭakena vaḍhakinā Sāmi-/-ṇa Veṇuvāsa-putena gharasa/mugha kata _dāruma_* *dh_u_*.

The wooden door of this cave was made as a pious gift by the carpenter Sāmi, son of Veṇuvāsa, resident of Dhenukākaṭa. {The carpenter not only worked on the door but must have done so at his own expense. The existence of the woodwork is not in doubt, but no workman's name is given as such anywhere else in the inscriptions, which concentrate upon the donors. A soft streak in the basalt runs through the epigraph, which is badly weathered}.

6. Left end of verandah, Caitya cave (S. 1; L. 1087):

Vejayaṃtito seṭhiṇā Bhutapālenā selagharaṃ pariniṭhāpita*ṃ* Ja*ṃ*budīpamhi ūtamaṃ.

Rock-mansion, the finest in the whole of India, completed by the financier Bhutapāla from Vejayanti. {The rock-mansion refers to the relief of a five-storied mansion on the left of the verandah, and possibly a duplicate on the opposite wall, unsigned, but with the legend *Sidhaṃ* (= L. 1086). Vejayanti has been identified with Banavāsī in North Kanara}.

7. Wall to left of central Caitya doorway (S. 17; L. 1103):

***maṇayūtāya dānaṃ veyikā.

(This) railing (is) the gift of (some lady). {The reading might be *samaṇamātuya*}.

8. Caitya façade, upper frieze, left of central door (S. 14; L. 1100):

Raño Vāsiṭhiputasa Sāmi-siri-P[uḷumāvi]sa savachare satame 7 gimhapakhe pa*ṃ*came 5 / *d*ivase pathame 1 etāya puvāya Okhaḷakiyāna Mahārathisa Kosikiputasa Mitadevasa putena / *ma*hārathinā Vāsiṭhiputena Somadevena gāmo dato V*alu*rakasaghasa V*alu*raka-lenāna sakarukaro sadeya-/-meyo.

On the first 1 day of the fifth 5 fortnight of the summer season in the seventh 7 year of king Sāmi-siri-Puḷumāyi son of Vāsiṭhi—on the above (date), a village was given by the Mahārathi Vāsiṭhiputa Somadeva, son of Mahārathi Kosikiputa Mitadeva of the Okhaḷakiyas, along with its taxes and dues, to the monastic order of Valuraka of the Valuraka caves. {What was given was the income from the village that the state would have received; but it is unusual that an official had the power to make the donation, which could normally be made only by the king. Hence, the Mahārathi was close to the king in power, unless words *etāya puvāya* have been misread, or conceal some reference to the royal patent. The name of the village might indicate the modern Vehergão at the foot of the caves.}

9. Caitya, left third pillar (S. 10; L. 1096):

Dhenukākaṭa / Dhaṃma-Yavanasa.

(Gift) of the Yavana Dhaṃma from Dhenukākaṭa. {The pillar has been wrongly given as the fourth}.

10. Caitya left fourth pillar (S. 7; L. 1093), belt of the capital:

Dhenukākaṭā Yavanasa Sihadhayāna thaṃbho dānaṃ.

(This) pillar (is) the gift of the Yavana Sihadhaya (Siṃha-dhvaja) from Dhenukākaṭa. {Pillar wrongly given as the 3rd}.

11. Same pillar shaft (V. 7). Identical with the preceding, but with the last three words in a second line and reading *yavaṇasa*.

12. Caitya, left 5th pillar (S. 8; L. 1094):

Sopārakā bhaya*ṃ*tānaṃ Dhamutari-/-yāna *Yasaka*nāthasa therasa/ bha*yaṃta*sa aṃtevāsisa bhāna-/-kasa Na*ṃ*dap*u*tasa Sātimitasa / saha *** t*i*hi *tha*bho dānamukha.

(This) pillar (is the) gift of the reciter Sātimita son of Naṃda, disciple of the Reverend Elder Yasakanātha of the venerable Dhaṃmutariyas from Sopārāka, together with ***. {This inscription has been erased, presumably because Sātimita later gave the gift in his own name, and added some relics for which the hole is seen on the shaft; *cf.* the next inscription}.

13. Below the preceding, same pillar (S. 9; L. 1095):

Sopārakā bhayaṃtānam Dhaṃmutariyānaṃ bhāṇa-/-kasa Sātimitasa / sasariro tha*ṃ*bho dānaṃ.

(This) pillar with the relics (is) the gift of the reciter Sātimita (a member) of the venerable Dhaṃmutariyas (sect) from Sopāraka.

14. Caitya, left sixth pillar (V. 8):

Dhenukākaṭā Somilana-/-kasa dāna thabho.

(This) pillar (is) the gift of Somilanaka from Dhenukākaṭa.

15. Caitya, left 7th pillar (S. 11; L. 1097):

Dhenukākaṭā Uṣabhadata putasa Mitade-/-vaṇakasa thabho dānaṃ.

(This) pillar (is the) gift of Mitadevanaka, son of Uṣabhadata, from Dhenukākaṭa. {The father Uṣabhadata has been taken to be the Śaka, son of Dīnīka and son-in-law of Nahapāna, who figures so preminently at Nāsik and in no. 29 below; but there is no evidence}.

16. Caitya left 8th pillar (V. 9):

Dhenukākaṭā Gola-vāniya-/-sa putasa Isalakasa thabho dānaṃ.

(This) pillar (is the) gift of Isalaka, son of the trader Gola, from Dhenukākaṭa. {The *da* of the last word shows a false start}.

17. Caitya left 9th pillar (V. 10):

Dhenukākaṭā Yavanasa / Yasavadhanāna*ṃ* / tha*ṃ*bho dāna.

(This) pillar (is the) gift of the Yavana Yasavadhana from Dhenukākaṭa.

18. Caitya left 10th pillar (V. 11):

Dhenukā*kaṭā* Mahamitā ghariniya.

Of the good wife Mahamitā from Dhenukākaṭa. {Badly cut, and perhaps incomplete. Mahāmātā would mean grandmother}.

19. Caitya left 13th pillar (V. 12):

Dhenukāṭā gahapatina*ṃ* Aśoka-/-sa n*a*tiye Dhamad*e*vayā dānaṃ / tha*ṃ*-bho.

(This) pillar (is the) gift of Dhamadevī, grand-daughter of the squire Aśoka, from Dhenukāta. {*Nati* is taken as the Pālī *ñāti* and Sanskrit *jñāti*, to indicate mere relationship, but the word must be the Prakrit feminine of *naptṛ*. The man's name is read Aseka by Vats, though the vowel quality is quite clear. The syncopation of Dhenukākaṭa was presumably due to rustic pronunciation}.

20. Caitya right 17th pillar (*EI*. 24, p. 282):

Dhenukākaṭā Miḷiṃdasa vejasa / thabho dāna sahā bhariyāya Jayami-/-tāy*e* sahā ca v*a* putehi Bhayabhutinā / Nābubhutinā ca Vasumitāya ca.

(This) pillar (is the) gift of the physician Miḷiṃda from Dhenukākaṭa, along with his wife Jayamitā, his two sons Bhayabhuti and Nābubhūti (and his daughter) Vasumitā. {K.A. Nilakanta Sastri and his colleague read the first personal name as Miṭidasa, but the *anusvāra* is clear, and the *hā* in sahā is nearer to the Śelārvāḍī type than the other pillars, so that the physician derived his name from Menander. The first name in the last line was misread *J*ebu°, but the letter is clearly *nā*}.

21. Caitya, right 16th pillar; unpublished?

Dhenukākaṭā Utaramatisa koḍupiniya D*rā*ghamitāya samāt*u*kāya dānaṃ thaṃ-/-bho.

(This) pillar (is the) gift of Drāghamitā, wife of Utaramati from Dhenukākaṭa jointly with her mother (or aunt). {Badly cut, light poor}.

22. Caitya, right 15 pillar (V. 6):

Dhenukākaṭā Cūlayakhana / Yavaṇasa thabho dāna.

(This) pillar (is the) gift of the Yavana Cūlayakhana from Dhenukākaṭa.

23. Caitya, right 14 pillar (V.5):

Dhenukākaṭā Rohamitena cūla-/-pitukasa Agilasa athāya thabo kārito.

(This) pillar has been caused to be made by Rohamita from Dhenukākaṭa, for the sake of his younger paternal uncle Agila.

24. Caitya, right 13th pillar (V.4).

Dhenukākaṭā Ya*va*nasa Dhamadha-/-yānaṃ thabho dānaṃ.

(This) pillar (us the) gift of the Yavana Dhamadhaya (Dharma-dhvaja) from Dhenukākaṭa. {This is the pillar topped by a Sphinx in place of a horse, on the darker side}.

25. Caitya, right 11th pillar (V.3.).

Dhenukākaṭā / vāniya-gāma-/-sa thaṃbho dānaṃ.

(This) pillar (is the) gift of the traders' association at Dhenukākaṭa. {This seems to be—palaeographically—one of the earliest references to such traders' associations, who decided all questions between its members, and sometimes took care of a member in difficulties; *cf. Daśakumāracaritaṃ* chap. 6; p. 233 of the *NSP* edition}.

26. Caitya, right 8th pillar (V.2):

Goṇekāka*ṭā* Dhamila upāsakasa*ṃ* deyadha*ṃ*ma thaṃvo.

(This) pillar (is the) pious gift of the lay worshipper Dhamila from Goṇekākaṭa. {The whole inscription is badly incised. Vats read *Goṇekākasa*, but the last syllable is *ṭā* or *ja* and the first two letters are also doubtful, so that this donor was, in all probability, also from Dhenukākaṭa, but unfortunate in his choice of scribe ad mason. His name has been read as Dhamula, but here the vowel quality seems unmistakable. *Goṇe* is also Pāli for 'cattle'}.

27. Caitya right 5th pillar (V.1):

Umehanākaṭā Yavanasa / Ciṭasa*ṃ* gatānaṃ thabho.

(This) pillar (is the) gift of the departed Yavana Ciṭa from Umehanākaṭa. {The exact meaning of *gatānaṃ* is in doubt, though the use of the genitive plural to modify a noun in the genitive singular is seen elsewhere in the Kārle inscriptions. The interpretation has generally been that *gaṭa* is a local or tribal *name, Garta*. Vats combines the name to get Viṭasaṃgata as the reading. The *anusvāra* is present but fortuitous, and Ciṭa seems correct, as a similar inscription *Yavanasa Ciṭasa gatānam* is found at Junnar (L. 1182; BI.33), as the donor of a dining hall cave on Shivnerī, just beyond the Shivābāi temple. Moreover, another such *gatānaṃ* gift has been made in the name of the Yavana Irila (Junnar, L. 1154; BI.5), so that *gata* has to be taken separately as 'departed', presumably 'dead'. The gift would then be posthumous}.

28. Caitya, inside belt of great arch (S.12; L. 1098):

Asāḍhamitāye bhikuṇi*ye* dānaṃ.

Gift of the nun Asāḍhamitā. {Note that the Buddhist monastic rules must have slackened—as may also be seen by the luxurious couples on the pillars and on the Caitya facade—if a simple nun could handle enough money to make such costly donations.}

29. Caitya facade, upper frieze, right of central door (S.13; L.1099):

Sidhaṃ raño khaharātasa khatapasa Nahapānasa jāmatarā [Di] n*i*kaputena Usabhadatena ti-/-gosata-sahasa-*de*ṇa nadiyā Baṇāsāyā suvaṇṇatatha-karena*** brahmaṇana ca soḷa*sa*gā-/-ma*de* *Pabhāse pūtatithe brahmaṇāṇa aṭhabhāyāp*ra**** *a*nuvāsaṃ pi tu sata-sahasaṃ bho-/-japayita Va*lu*rakesu leṇavāsinaṃ pavajitānaṃ cātudisasa saghasa / yāpaṇatha gāmo *Kara*jiko dato sa * na *** vāsitānaṃ.

Perfection! The village of Karajika has been given for the support of the ascetics living in the caves at Valuraka, belonging to the Order in general, for all who would pass the rainy season (in those caves), by Usabhadata, son of Dīnīka and son-in-law of the king, satrap, *khaharāta* Nahapāna. (This Usabhadata was the) donor of 300,000 cows, giver of gifts of gold and a place of pilgrimage on the river Baṇāsā, donor of 16 villages to the gods and the Brahmins, who arranged for eight wives to be married to Brahmins at the pure pilgrimage-spot Pabhāsa, the feeder of 100,000 Brahmins a year

30. Caitya, frieze between central and right hand doors (S.19; L. 1105):

ānapayati Mam̃āḍe amaca parāgata-gāmasa etha lenesa Vālarakesa vāṭhavāna/pavajitāna bhikuna nikāyasa Mahāsagh*i*yāna y*pan*ya etha Māmālāhāre utare mageg *m* Karajak*e*/bhikhuhaledadama—etesa tu—gāma—Karajake—bhikhuhala—deya—pāpehi—etasa—casa/ gāmasa Karajakāna bhikhuhala-parihāra vitarāma apāvesa a*** ***pārihārika ca etehi na parihārehi pariharah* et* casa gāma Karajake/bhikhuhala-parihāre ca etha nibadhāpehi aviyena ānata*** *** chato vijayatha-satāre dato *ṭhehukā paṭīkā* sava *14*/va pa 4 diva 1 Sivakhadagutena kaṭā.

[The king ***] thus commands his legate at Māmāḍa—for the support of the sect of the Mahāsāṃghikas, ascetic almsmen living here in these caves at Vālaraka, come to shelter from foreign parts, do we give the village Karajaka here on the northern road, as monks' land. For them (alone) is the possession of the village Karajaka guaranteed as monks' land. And to this village of Karajaka do we grant (all the usual) immunities appertaining to monks' land: not to be entered (by royal officials) *** to enjoy all (other) kinds of immunity. With all these immunities have I invested it. And I have had registered here this village of Karajaka and the immunities enjoyed by monks' land. Ordered by word of mouth, written (down) **** given at the victorious ***** charter executed by Śiva-khaṃdaguta in the year 14 (of the reign), on the first day of the fourth fortnight of the rainy season. {This, in reality, is only confirmation of no. 29, after Nahapāna's defeat. *Amaca parāgata-gāmasa* may mean 'legate of conquered villages'. The cult of the goddess Karajāi, 'Mother-goddess (of) Karaja' still exists at the village of Indūrī, on the Indrāyaṇī, four miles east of Taḷegão railway station. If the interpretation 'northern road' is correct, the direction can only be from the royal headquarters, not from the caves. A village Karaṇḍolī lies beyond Vehergão}.

31. Caitya, over right doorway (S. 4; L. 1090):

Dhenukākaṭā ** gaṃdhikasa Sihadātasa dānaṃ gharamugh*a*.

(This) door (is the) gift of Simhadata, a perfume merchant from Dhenukākaṭa.

32. Caitya wall to right of central door, close to rail pattern (S.18; L.1104);

Koḍiya bhikhuṇiy*e* Ghuṇika-mātu veyikā dānaṃ Naṃdikenā kataṃ.

(This) rail, (is the) gift of the almswoman Koḍi, mother of Ghuṇika; made by Naṃdika.

33. Caitya, above pair of figures at right corner of verandah (S.15; L.1101):

Bhadasamasa bhikhusa deyadhama mithūna ve.

(These) two couples (are the) pious gift of the almsman Bhadasama.

34. Caitya, below feet of the three elephants at right end of the verandah (S.3; L.1089):

Therānaṃ bhayaṃta-I*m*dadevasa hathi ca puvādo hathinaṃ ca uperimā *he*thimā ca veyikā dānaṃ.

(These) elephants and the railing-pattern above and in front of the elephants (are the) gift of the Reverend Elder Iṃdadeva.

35. Caitya, inner side of right hand screen of verandah, above a relief sculpture of a couple (S. 16; L. 1102):

Bhadasamasa bhikusa deyadhamaṃ mithūnaṃ.

(This) couple (is the) pious gift of the almsman Bhadasama.

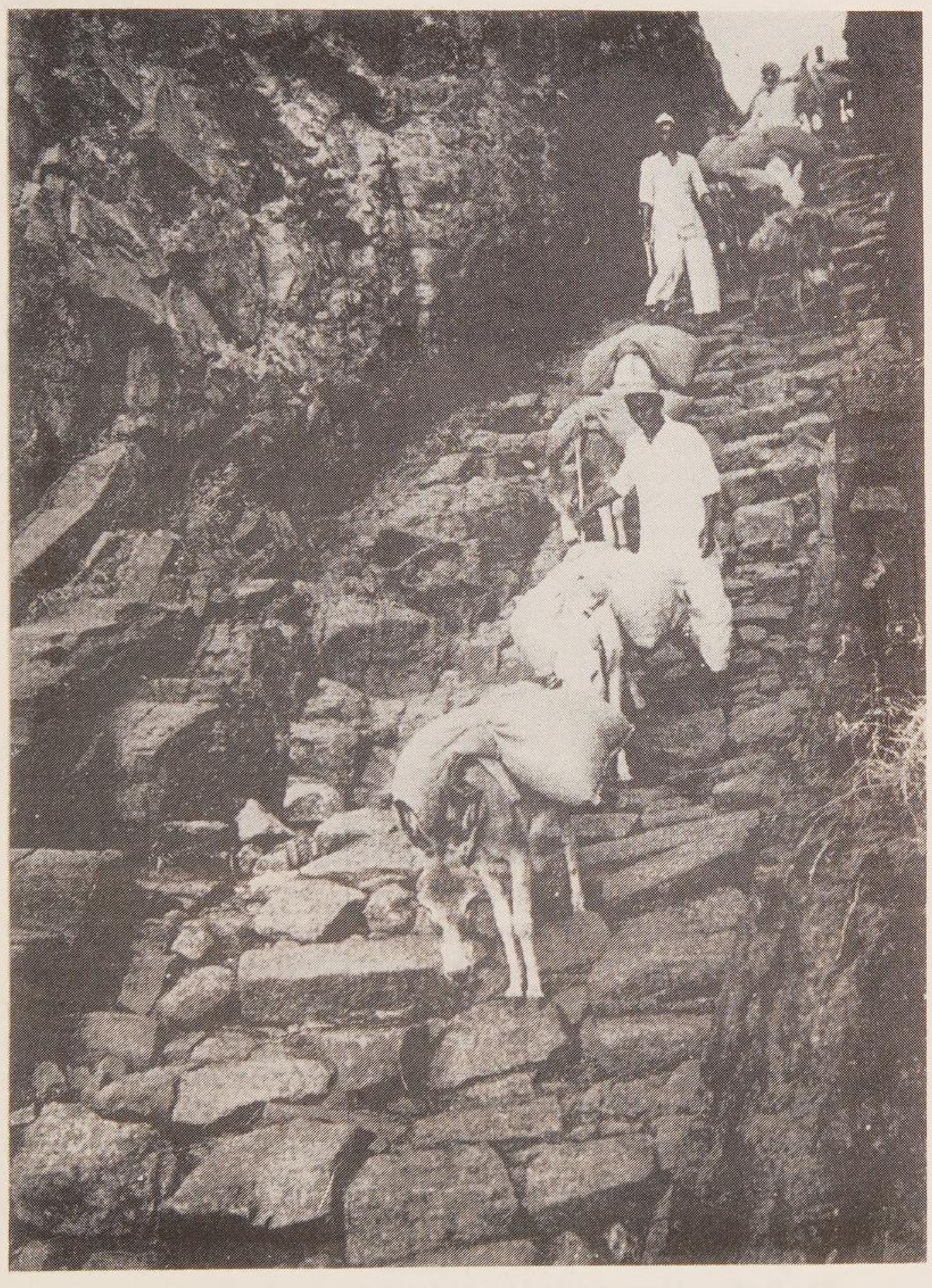

Fig. 1. Donkey caravan beginning the Nāṇeghāṭ descent; note horned pack-saddles to keep the load from slipping over the pack animal's head. Photo from the platform in front of the Sātavāhana cave.

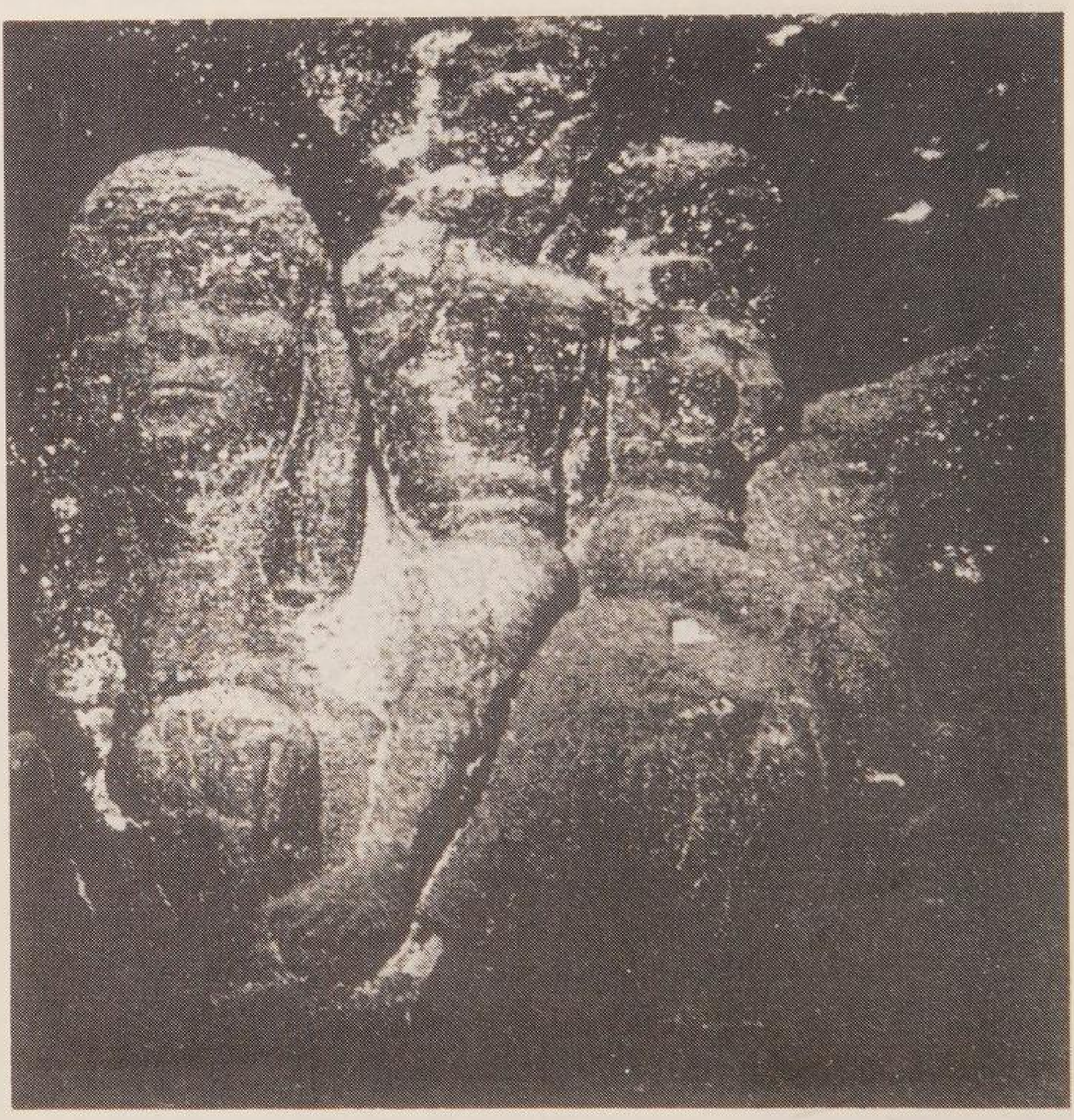

Fig. 2. Sphinx on capital of rt. 13th pillar, Caitya cave, Kārle (photo courtesy of the National Defence Academy, Khadakvasla). Other photographs show even more clearly that a support has been left beneath the Sphinx's claws, which therefore look like knees.

36. Front wall of a vihāra cave, a furlong south of Caitya, top left of entrance (S. 22; L. 1108):

Sidhaṃ pavaetasa Budharakhitasa *deyadhama*.

Perfection! Of the monk Budharakhita. {It is not clear whether the cave was the gift of Budharakhita, or his residence; the last word is virtually imaginary in Senart's paper-impression and no trace of it now remains. The Budharakhita may be identical with the monk who signed Kārle 1}.

37. Inscribed stone found near the caves (V. 13):

****khusa Śega*-put*r*asa.

Of the *bhikṣu*, son of Śega. {Other such inscribed pieces might be discovered by searching through the pieces fallen from the earliest caves, to north of the Caitya, whose front walls have collapsed entirely, to the extent of breaking off and bringing into the open stairways which were at one time tunnelled through the rock for access to the upper tier of caves.}

ŚELĀRVĀDI

1. Sidhaṃ / Therānaṃ bhayaṃta-Sihāṇa ate-āsiṇiya / pāvaïtikāya Ghaürāya bālikāā Saghāya Budhā / a ca cetiyagharo deyadha*mm*a mātā-pita ūdisa saha ca sa-/-vehi bhikhu-kulehi saha ca ācarivehi bhatavireyehi sa-/-māpito.

Perfection! This Caitya-house is the pious gift for the merit of their parents and presented for the use of all categories of almsmen, belonging to schools founded by diverse teachers, by Saṃghā and Budhā; daughters of Ghaürā, (the disciple of the Reverend Elder Siṃha), who took holy orders. {This inscription is to the left of the inner entrance to the cave towards the Pavanā valley, now used as a Śiva temple. The original caitya capital still remains attached to the ceiling, and is now bored to suspend the water-pot which wets the Śiva symbol; the rest of the stūpa has disappeared, presumably having been cut away, but not trimmed to the *liṅga*, which is a later addition. The cave has a front wall added, traditionally, by one of the Dābhāḍe barons whose keep at Indūrī may be seen from the caves, and whose seat Taḷegāo is the nearest large village. The name is given by Ghosh [read: Dasgupta] as Ghaparā, in *EI*, 28.77 but *u* or perhaps *ḍa* is the correct letter}.

2. (L. 1121) Sidhaṃ Dhenukākaḍe vāthavasa / hālakiyasa kuḍubikasa Usabha-/-ṇakasa kuḍubiṇiya Siaguta-/-ṇikāya deyadhaṃma leṇa sahā pute-/-ṇa Ṇaṃdagahapatiṇā saho.

Perfection! (This) cave (is the) pious gift of Siagutaṇikā, wife of the ploughman-householder Usabhaṇaka, resident at Dhenukākaḍa; (made) jointly with (her) son the squire Ṇaṃda along with. {Ploughman-householder would mean a person who had occupation rights to the land which he worked, and was not a labourer who ploughed for someone else. The son had risen in the world to the status of a *gahapati*, head of a large household, which I translate as 'squire'.}

BEḌSA

BI. 1; L. 1110 (behind a votive stūpa):

Yāgobhutinaṃ āraṇakāna peḍapātikānaṃ Marakuḍavāsiṇaṃ thupo / . . . aṃtevāsinā bhat-Āsāḷamitena kārito.

. . . (Memorial) stūpa made by Bhaṭṭ-Āṣāḍhamitra, disciple of Yāgobhūti, the mendicant forest hermit resident at Marakuḍa. {The inscription is greatly worn. The initial letter, read as *ca*, is almost certainly *yā*; in the donor's name, *ḷa* could also be read as *ḍa.*}

BI. 2; L. 1111 (water cistern):

Mahābhoya-bālikāya Maṃdavi-/-ya mahārathiniya Sāmaḍinikāya / [de]yadhamma Āpadevaṇakasa bitiyikāya.

Pious gift of Sāmaḍinikā, a Mahāraṭhini, a Maṃdavi, daughter of a Mahābhoja, and wife (or second wife) of Āpadevaṇaka. {The published BI. reading is ma[hā] deviya, making Sāmaḍinikā a queen. But there is no room at all for the extra syllable. The Mahābhojas are well represented at Kuḍā, and several times called Maṃdava (both together, BI. 9, 17, 23; *maṃdava* alone, BI. 14); presumably, indicating the chief of a tribe in some locality near the Mahāḍ-Rājpuri region. In any case, it would be difficult to imagine the titles Mahāraṭhini and Mahādevī being held simultaneously, especially when the husband is not called a king. The lady's name also be read Sāmaḷinikā.}

BI. 3; L. 1109 (Lintel of cell door, right side in Caitya cave):

Nāsikato Ānadasa seṭhisa putasa Pusaṇakasa dānaṃ.

Gift of Pusaṇaka, son of the financier Ānanda from Nāsik. {Much worn.}

BHĀJĀ

BI. 1; L. 1078 (Cave 18, west of Caitya):

Nāḍasavasa Nāyasa bhāgavatasa gābho dānaṃ.

Of the Nāya (?Nāga) Nāḍasava, follower of the Blessed One (is this) cell the gift. {BI. read Bhogavata, taking it as a place-name, but *Bhāgavata* is the best reading possible. Later, this would mean worshipper of Viṣṇu or Kṛṣṇa, but in spite of the Heliodoros pillar, Bhagavat here can refer in the context only to the Buddha, whose normal title it was in Pali canonical literature}.

BI. 2; L. 1079 (cistern):

Mahāra*t*hisa Kosikiputasa / Viṇhudatasa deyadhama poḍhi.

(This) cistern (is the) pious gift of the Mahārathi Viṇhudata, son of Kosikī.

BI. 3; L. 1080 (2nd stūpa front row; all the stūpa inscriptions are badly weathered):

Therānaṃ bhañaṃta Dhamagirinā thupa.

Stūpa (in memory) of the Reverend Elder Dhamagiri.

BI. 4; L. 1081 (base, third stūpa):

Theranā*ṃ* bhayaṃta Aṃpikiṇakānaṃ thupo.

(Memorial) stūpa for the Reverend Elder Aṃpikiṇaka.

Bl. 5; L. 1082 (base, 4th stūpa):

Theranā*ṃ* bhaya*ṃ*ta Saghadinānaṃ . . .

(Memorial stūpa) for the Reverend Elder Saṃghadinna.

BI. 6; l. 1083 (2nd row, stūpa capital; unchecked):

Therānam bhayaṃta. . .

BI. 7; L. 1084 (Right hand cell door, vihāra cave VI, east of caitya):

Badhāyā hālika-jāyāye dānaṃ.

Gift of Badhā, a ploughman's wife. (The name should be Budhā as at Śelārvāḍi, but the rough background makes determination difficult).

BI. 8; L. 1085 (large stūpa in front row):

Pacannavasi-bhuta-satānaṃ thu[po].

(Memorial) stūpa for a holy man who had reached the age of 95.

{The name of a donor seems to have been carved on a wooden rafter or pillar found at Bhājā, but is not included here. Its main interest lies in proving that the original woodwork of not later than the second century AD could last to the present day.}

NOTES

In the abbreviations: *EI* = *Epigraphia Indica* by volume and page; *JRAS* = *Journal of the Royal Asiatic Society* (London), by year and page; *L* = H. Lüders, appendix (on old Brahmi inscriptions) to *EI*. vol. 10; for the *Periplus of the Erythraean Sea*, the translation of W. Schoff (New York, 1912) has been used; for Ptolemy's geographical account, J.W. McCrindle's translation. For field work, preliminary knowledge was gained from the old Bombay Presidency Gazetteer (particularly vol. 18, pt. 3), supplemented by Survey of India maps (mostly to scale ½´´ = 1 mile). I am grateful to the National Defence Academy authorities at Khadakvasla, and to Mr J.B. Patankar (curator at Kārle) for their kind cooperation. A. Nikitin's narrative is one of four translated in R.H. Major's *India in the Fifteenth Century* (The Hakluyt Society, London; 1857), see especially pp. 9–10, 12 and 26. For the historical background, the reader may find my *Introduction to the Study of Indian History*. (Bombay, 1956), Chapter 8, of some use.

My special thanks are due to Lt. Col. D. M. Kee and the Cadet-members of the N.D.A. archaeological club for their enthusiasm and efficient organization of the field-works.

28

The Buddhist Caves of Western India*

Over a hundred thousand visitors from all parts of the world troop every year to Elephanta, Kanheri, Karle, and other caves within a reasonable distance of Bombay. Their main purpose is to see some of India's—and the world's—finest sculpture, such as the magnificent Trimurti at Elephanta and the handsome couples carved in relief on the facade and, in the round, on the pillar capitals of the Chaitya at Karle. A smaller number go as far as Bhaja, with its beautiful reliefs at the entrance of the assembly hall. The number visiting Bedsa is very much smaller. Only the hardiest can brave the miserable road and cart-track to the rediscovered caves of Karsamble and Thanala in Sudhagadh taluka, and most of them, fail to see the Mahayana Buddha image at Gomashi. There are many other caves in the region: no less than 135 in the four major complexes about Junnar. The Shelarwadi system, though very easy of access, is visited mostly by followers of Saint Tukaram, who meditated there long after the original Buddhist occupants had become less than a dim memory. There are other caves in the same valley, in plain sight, but missed by the average visitor. Some—like those at the base of Bhandara hill near Dehu—do not figure even in the generally comprehensive Bombay Presidency Gazetteer of 1885. The number of these caves is impressive and the immense labour spent in carving them out by hand labour (without blasting) out of the refractory basalt is even more so. Still more remarkable is the type of art in these caves; so completely incompatible with the Buddha's austere and even ascetic preaching. These are the points that should be of particular interest to the thoughtful visitor.

1. Elephanta is Brahmanical, and is in any case decidedly later than

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The Times of India, Annual, 1961, pp. 72–82. [The illustrations of the original essay could not be reproduced for technical reasons.]

the Buddhist caves. Its peculiar features may be explained as due to the desire to emulate and surpass its Buddhist rivals on Salcete island and on the mainland. Karle illustrates our meaning. The cells at Karle were exclusively for Buddhist monks who officiated in the great Chaitya, which was naturally visited by a large number of lay followers. The Buddhist monk was strictly enjoined by the Pali scriptures not to touch or deal with gold and silver. His possessions were limited to: three dhoti-like *chivara* garments, preferably pieced out of rags; a begging bowl, water-jar, oil-jar, plain staff, needle and thread, razor, and if his feet were tender, rough undecorated sandals. He gave away all his worldly possessions before joining the Order, and thereafter he had to live a celibate life, and to travel on foot, never sleep in a village. Only in the rainy season could he stay in a shelter, and this had to be away from the dwellings of those who had not yet renounced the world. The rest of the time, he had to travel on foot; in any case, he had either to beg his food or to gather it from the ground and trees without injuring animal or insect life.

Why then were these caves decorated with handsome bejewelled women, bare of breast, otherwise dressed in the thinnest of delicately made clothing, and set in poses that show them fully conscious of their beauty and of its effect upon the finely built and very well got up virile lovers that accompany them in the sculptures? Some of the donations were made by the monks or nuns themselves, not even by their disciples and lay followers. Clearly, monastic life could be enjoyed by these people without relinquishing their direct control over considerable wealth. And this wealth affected their mentality. The scenes at Karle are definitely not taken from the life of the Buddha, nor from the Jatakas. A few may have been painted on the pillars, which still bear traces of pigment; Bhaja had such paintings on the pillars, still faintly visible, and those at Bedsa were whitewashed and then scrubbed off with the whitewash in the days of the British Raj. Thanala and Karsamble must have been at least as impressively painted as Ajanta and Ellora in the days of their glory. Nevertheless, the emphasis in all these cases, as far as we can judge, was on secular art, with the thinnest religious disguise, or none. Why?

2. The answer is plain, when one considers how the caves are distributed. They follow the trade routes, and the largest caves are invariably at the junction of such trade routes, or in the later period, near the ports as at Kanheri, Kuda and Mahad. Kuda, five and a half rough miles from the State Transport terminus of Tale, is still an attractive set of caves though rarely visited because of the comparatively difficult access. There are caves on the road to Alibag, and others at Chaul-Revadanda.

The latter was one of the great West coast harbours in antiquity (like Kalyan and Broach), and the *Periplus of the Erythraean Sea* written by a Graeco-Roman trader in the first century AD describes the immense trade in costly articles (wines, fine cloth, lead and other metals, etc.) which poured through it to a city called Tagara which can only have been Junnar (*Jirna-Nagara*, the Old City).[1] The caravans could not use bullock carts, but only pack-animals. The Deccan trade routes did not follow modern roads or railway lines, because the water needs of modern cities confine them to river banks. The river-side over two thousand years ago was still swampy, flanked by jungle which made for rough going and concealed dangerous beasts. The best track was always at the margin of the valley proper, along the foot of the relatively barren hill-side. This, incidentally, was the track followed by local sheep-herders who were still in the stone age, without plough cultivation. Thus, both trader and monk would be most likely to meet the people they wished to particularly at the crossing of such tracks which was generally a place of sacrifice. Sometimes, it was easier to find a track further up the hill. Always, it was less tiring for the pack-train animals, and for the head-load porters to scramble over a relatively steep saddle-back rather than go even a couple of miles more around the foot of the hill. For example, one major route went past Kondane Caves in the Khandala valley. This was fed by a track which came up the narrow valley between Karjat and Khopoli. At the end of this section which abuts the Bombay-Poona road, by the village of Hal, is a set of caves in poor condition. But rather than go around *via* Palasdari, the caravans must have climbed over the site of the railway tunnel (No. 16) where there is a set of caves.

The main problem was how to get up the frowning scarp of the Western Ghats. None of the labour spent on the caves was systematically employed in annual improvements to these passes. So we find innumerable small individual cells all along the route, with great complexes at the final junctions (such as Junnar and Nasik) or at the best passes. Among the latter are the caves of Kondane, Karsamble, Thanala, Karle, Bhaja, and Bedsa. The routes are outlined the moment the intermediate cells are dotted on the map. These passes are still used by the poorest drovers, and the Lamans whose ancestors carried the trade through the centuries still eke out a painful living with their pack-animals, now mostly employed to carry the charcoal through the jungle to dumps that can be cleared out by lorry.

3. The association with merchants is borne out by other evidence than the location of the caves. Many of the merchants have signed numerous donations in the caves. There was a merchant-guild or association at

Dhenukakata, a settlement from which many Greeks have recorded their own gifts to the Karle charity. The international character of the trade is thus proved. One has only to flash the light of a powerful torch on the capital of the 13th pillar on the right in Karle Chaitya to see a good copy of a sphinx statuette which, at that time, could only have come from Alexandria. Another sphinx on the left 10th pillar is a bit more doubtful, but the centaurs on a Bhaja pillar capital surely represent fine Indian execution of a foreign motif. The Dhenukakata settlement must have been near Karle, probably the hamlet of Deghar or Devgad.

We think of trade today as the exchange of goods for money. But money meant nothing to the primitive tribes, so that the bulk of the trade was at the two ends of the long route. However, trading for forest produce was unavoidable (and profitable) *en route,* which means barter against food-grains, salt, pretty beads, and trinkets. Primitive trade, however, is not a matter of haggling. It appears as an exchange of gifts which cannot be refused, and for which there is no standard price, but which obliges the recipient to give some equivalent gift at some time. The exchange cannot take place in primitive society except between members of the same tribe or human beings who recognized some sort of kinship. Traders and monks from the north broke through this barrier, one bringing economic advantage, the other a religion that made a unified society out of separate tribes. As more and more forest produce was brought by the tribesmen and bartered for the merchants' wares, tribal chiefs became independent of tribal property restrictions and turned into kings or nobles ruling over their fellow tribesmen. We may see this at Mahad and Kuda where several princes, localities, and even Harijans bear tribal names.

The caves were very important customers for the merchants. Considerable amounts of precious metal and bronze had to be imported for images and reliquaries whereof the marks are still clear. Some at least of the numerous stupas must have contained ashes in silver caskets. At Junnar, metal image of some sort had been set in some of the stupas, and violently torn out. The caves were festooned with metal lamps whose soot has blackened most of the ceilings, and whose sockets or chain attachments are still visible. The monks needed clothes and we know that many of them had taken to the costliest silk dyed in saffron by this time.

The caves enjoyed the yield of several villages and must also have been useful outfitting centres for the caravans. Fresh animals could be purchased, with grain, and other supplies, from the bursting monastic stores, were also for sale. We know from Chinese records that the Mahasamghikas, the principal sect of Buddhists at Karle, were good financiers, so that these monasteries were also the principal banking houses on the trade routes. The kings and devout lay-followers gave numerous gifts and capital was always swollen by the funds of aged merchants who took the vows. With their money, they must have brought their knowledge of trade, markets, and finance. In most of the caves, one finds arrangements for solid doors, barred windows, and inner treasure-rooms.

4. It is easy to see why the monasteries developed their luxurious sculpture, and how the elements of decay were present in the love of ostentation. When local self-contained village economy developed, the luxury trade and cash economy declined. The monasteries locked up too much metal, and did nothing to stimulate production. Gradual ruin was inevitable, made more abrupt by theological changes. The Brahmins and their royal patrons found all this hoarded wealth far too tempting to give up. There is impressive evidence to prove the economic motivation of great changes in religion.

If we concentrate only upon the wealth of the cave monasteries and the luxurious ways of the monks who rode on elephants and passed the days in useless disputation, we lose sight of the great civilizing function of the monastic foundation. They first brought real civilization to the Deccan and made its economic development possible. Before them the region had only savage tribesmen, barely able to use stone tipped arrows, without pottery, without iron or bronze, without the plough, and without a common language. It was the trader and the monk that brought these into a region that has played so considerable a role in the history of India. The early monk with his fearless and calm mien first gained the confidence of the tribesmen. He was enjoined by his religion to wean them away from blood sacrifices, and this too he did without violence, purely by persuasion. Human sacrifice was not unknown in the woods, and the monk risked his life when preaching against the animal sacrifices, some of which returned after the monasteries were deserted. In most cases it can be proved that some aboriginal cult existed near the spot before the caves were hollowed out. Some of the caves, as Saint Tukaram's at Bhamchander, are still natural hollows; others in the same group have been enlarged by human hands and have gone through several stages—monastic cell, Chaitya, Shiva temple—while the primitive patron deities of adjacent villages are still represented by red-coated stones. At Karle, Bombay Kolis still make vows for children to their goddess Yamai, whose shrine is just outside the Chaitya. These Kolis, remarkably enough, also identify the goddess with the stupa, and dedicate the children to her at the stupa in Karle Chaitya. At Junnar, the Manmodi caves had their name (Manamakuda) before the Buddhists, as we can read from the inscriptions. At present, three Jain images (Neminath, Adinath, and Ambika) in the caves are together worshipped as *one* goddess, Manmodi! The Shiva-bai temple at Junnar (Shivneri Fort) is built into a cell adjoining a dining hall for Buddhist monks donated by a Greek Chita, in whose name a pillar was also dedicated at Karle.

It was not for nothing that kings made such generous gifts—gifts that were confirmed (as at Karle and Nasik) by other kings who overthrew the dynasty and often worshipped other gods. For the king, the monasteries stimulated village settlement. The bandits of the early days never touched the monks, and a sincerely repentant brigand could turn monk to receive sanctuary. The peasants who worked for the monasteries received tools and seed, and paid in return a reasonable portion of their yield; monastic property was tax-free. Orchards and market-gardening, too, were begun by the monasteries. These set the example for other villages that soon developed in the countryside, to give more taxes to the kings than they surrendered. Even the tribesmen received food in times of famine (as did the peasants), because charity was a function of these foundations and they alone had a considerable surplus. They were, at their early best, the indispensable stimulus—one, might say the vitamins—for the economic growth of the empire of the Satavahanas.

But it was a totally different type of society that the caves served in their heyday. Carpenters, black-smiths, physicians, fishermen and scribes all made enough money to donate a pillar, a door, or a cell. Princes deposited their cash donations with guilds of oilmen, bamboo workers or braziers, so that the interest could be given in perpetuity to the Order. Throughout, there was a sense of unity and purpose; a single plan was carried out by the funds of many, given over several centuries. The visitor should realize that the entrancing beauty of sculpture and design comes from a freer, more vital and elastic social structure that was later stifled under the dead weight of the 'timeless, unchanging villages'.

NOTE

1. [Kosambi's identification of Tagara with Junnar appears untenable. Tagara is generally identified with Ter on the Godavari near Osmanabad in the Marathwada region of Maharashtra.]

29

Notes on the Kandahar Edict of Aśoka*

The publication of a bilingual Greek-Aramaic inscription of Aśoka from Shar-i-Kuna near Kandahar in Afghanistan[1] may add a degree of certainty to what have been reasonable conjectures. The editors have done their work so well that one need comment only upon certain implications which did not concern or interest them.

1. G.L. Della Vida notes on p. 29 of the brochure, that the Aramaic is not a translation of the Greek, but that both derive from a common source, presumably the (Māgadhī) rescript sent out by Aśoka's chancellery. Actually, we may see more than that. The edict was composed specially for the frontier region; its precise counterpart is found nowhere else. Aśoka knew (as his other edicts state) that the various Indian sects, the brahmins, and the *śramaṇa* ascetics did not exist in Yoṇa. Pāli canonical literature shows awareness of the fact that Yoṇa-Kamboja and other countries beyond the frontier had not four castes but only two: 'free' and 'slave', which were not immutable. The emphasis in this edict is upon non-killing, attentiveness (*śuśrūṣā*) to the needs of parents and elders, and perhaps upon *dhamma*—a term difficult to explain even now. In the Greek, this is rendered *eusebeia*, though Menander would later describe himself as *dhammaka* = *dikaios*. The Aramaic, developed as a *koinê* under the Persian empire, uses perhaps *qšṭ mhqšṭ*, or *ptytw*, the exact equivalent being still in doubt.

The question could have been of no great importance for Aśoka's secretariat, for rather peculiar reasons. The *Arthaśāstra* type of administration which was now being abandoned even for the Magadhan heartland had never prevailed in Afghanistan. In the *Arthaśāstra, dhamma* is

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used generally in the sense of the 'innate natural law' for each group of men, whether tribe, caste, or guild. The secondary meaning 'religion' does not conflict with this, for every such group had its own particular religion, consisting of special rites and observance. The difficulty arose only when these diverse groups had to function together as a society without conflict. It was at this stage that the need for a *dhamma* in some broader sense became necessary. Buddhism was one of the answers to this social demand for cohesion just as the Magadhan 'universal monarchy' was another. Aśoka's *dhamma* is therefore not to be understood as Buddhism, but as some code of behaviour for all society which could be followed without damage to the various older group-*dhammas*.

Aśoka's *dhamma-yātā* of the eighth rock edict (*RE*) could not have been just a pilgrimage, nor even one combined with a tour of good works and proselytising for Buddhism—as so many (including the late Jules Bloch) would have it. However, it was obviously and consciously in striking contrast to the traditional royal progress through the dominions, the former *vihāra-yātā* for eating up local surplus which combined inspection with pleasant diversions such as hunting. The definitive words of *RE* 8 are *janapadasa jānasa dasane dhaṃmānusaṭhi ca dhamapalipuchā ca*: 'inspection of tribal districts, of the tribes, and inquiry into (their local) *dhamma* and adjustment of that dhamma'. The usual translation removes *janapada* and *jana* from the context, which carried the residue into: 'instruction and examination in morality'. Similarly, the *dhammamahāmātā* proclaimed as a radical innovation in *RE* 5 were officials (appointed also over Kandahar, as we are told) endowed with ample funds and full powers even to commute death sentences. One of their principal duties was to see that the subordinate *dhamma-yutas* were unhampered in their work. If this task had primarily been that of reconciling theological differences in the modern sense, the powers are surely excessive for the time and the country. The casual rendering of *dhamma* at Shar-i-Kuna would then be inexplicable, and the Afghan edict rather trivial for publication at an important junction of trade routes. If, however, these new special administrators were empowered and directed to readjust the innumerable group *dhammas* to the needs of society as a whole in order to reduce the state's drastic use of force and punishment in the *Arthaśāstra's* system of administration, the edicts become quite logical, and impart fundamental new information to the present-day reader just as they proclaimed new rights in their own period.

2. If the Kandahar inscription was originally dictated in Māgadhī,

translated independently into Greek and Aramaic, and finally inscribed in these two langauges with their particular alphabets, why has this not happened elsewhere so far as can be discovered? None of the proper Indian edicts of Aśoka is in any local Indian language; the alphabet is Brāhmī or Kharoṣṭhī. It seems reasonably clear from this that throughout the length and breadth of India proper (or at least that portion which lay within the Aśokan sphere of influence) there did not exist any script other than Brāhmī or any language other than Māgadhī which could be understood by a considerable number of the people or be regarded in any district as a *lingua franca*. This is particularly surprising in a place like Kaliṅga where the devastating Aśokan campaign affected several hundreds of thousands of people. The Kaliṅga population was therefore under Aśoka's special care. It is difficult to imagine that they spoke the same language as that of Uttar Pradesh in the third century BC. Nevertheless, Aśoka addresses them (and admonishes his officials to treat them with special care) solely in the Magadhan speech. The explanation can only be that Kaliṅga had far too many tribal languages of its own for any one to be chosen over the other, and that none of them were at that time literate. A similar situation is to be discerned today in any tribal area in Assam, which still has some 175 langauges and where even large tribes like the Garos and the Nagas speak strongly variant dialects among themselves. Similar reports were given of the South Sea Islands in older days, to the effect that a language could be found at times confined to a unit as small as a single village.

If this be admitted of Kaliṅga, it must have been true of less populated regions such as Mysore. The traders who penetrated the south had introduced for the first time something like a common language which could be understood at least along their trade-routes. Most of the actual dissemination must be credited to the Buddhist monks who preached the Law along the same tracks. The tremendous Deccan cave monasteries give impressive proof of the closest cooperation between missionary and caravan merchant, originally both Magadhan. Certain colonies of northerners in the south must also be taken into account. The Jain *ācārya* Bhadrabāhu's migration still needs to be attested by archaeological work, but is historical without any doubt.

My contention is supported by various local inscriptions just after Aśoka. The Sātavāhanas used not only the Brāhmī script but also the Māgadhī language in their epigraphs. Nahapāna and Uṣavadāta were themselves Śakas, but their inscriptions like those of Khāravela are also in the same script and language. Clearly, these kings of such varied ethnic origin boasted of their exploits in a language which had the best chance of being understood by the maximum number of literate people of their day. Yet languages not derivable from the Indo-Aryan stock are now current over a considerable part of these ancient kingdoms, particularly in those portions that did not lie on the most used trade routes from Magadha. The separate development of Kanarese and Telugu as against Marāṭhī and Oriya indicates precisely the slow emergence of late provincial common markets.

NOTE

1. *Un editto bilingue greco-aramaico di Aśoka; la prima iscrizione greca scoperta in Afghanistan.* Edited with translation and notes by G. Pugliese Carratelli (Greek) and G. Levi Della Vida (Aramaic), with a preface by G. Tucci, and introduction by U. Scerrato. The reader should excuse my using chapter 7 of my own *Introduction to the Study of Indian History* (Bombay 1956) without further reference, for the background.

30

Indian Feudal Trade Charters*

This[1] note comments upon two copper-plate grants of which the older[2] is dated about AD 592 and the later[3] approximately AD 710. Had they not been sadly mangled in translation, they might have cast considerable light upon the role of the trader in the development of feudal society. Hitherto, it has been customary to merge two millennia of Indian history together as 'ancient India', which amounts to denial of any basic development.

1. An inscription at Kārle[4] shows that trader' unions of some sort existed even before the Christian era unde the title *vāniya-gāma*, quite apart from the rich Greek and Indian traders who made individual contributions to the magnificent Caitya cave. The ancient meaning[5] of *grāma* as a united mobile kinship (*sajāta*) group rather than 'village' was carried over in this usage. The collective wealth and power of the merchants' *grāma* does not seem to have been dominant at this stage. Princes of that period such as Uṣavadāta made donations[6] in perpetuity to the monastic Order at Nasik, in the form of interest upon capital deposited with various producers' guilds (oilmen, weavers, etc.) The word for guild is *śreṇī* or its Prakrit equivalent. This term is common in the *Arthaśāstra* of Kauṭalya for associations of people who had just left the tribal stage but carried their unity—presumably originating in blood relationship—into more than one productive activity. The members of the older *śreṇī* would cultivate grain, herd cattle and colonize waste land. At the same time, they might engage collectively in other production such as that of cloth, or indulge in trade, and take to arms at need. That this flexibility survived to the Gupta period is proved by the famous Mandasor inscription (*F* 18) composed by Vatsabhaṭṭi in AD 473.

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The *Arthaśāstra* state was itself the major producer of its day, virtually a monopolist. Merchants were encouraged only to carry on import and export trade between *janapada* territories separated by waste land and forest, but had virtually no control over local production and trade, dominated entirely by salaried royal officials. This system changed during the reign of Aśoka, with the vast new country opened up for the merchants and for village settlement. The older state management could no longer function efficiently enough to collect and to distribute the village surplus, let alone to supply the villages over long distances through difficult terrain with such necessitites as salt and metals. The traders took over the two latter functions; corresponding to them there had to be a class of surplus gatherers, the barons, who could collect the surplus as taxes, dues and rent from the villagers.

The essential difference, which developed gradually, was the predominance of merchant guilds controlled by rich families over the older type of workers' *śreṇī*. This implies not only progressive deterioration of producer's guilds due to greater internal disparities in wealth, but also denser settlement in villages. Thus, the *vaṇig-grāma*, which spread into the south as *maṇi-grāmam*, was an association of traders related by common interest in trade that had to pass through a particular centre, but traders were given royal charters of the type which form the main basis of this note. They enjoyed sepcial immunities, but were restrained from excesses against their hired workers.

The change could not have been sudden, nor simultaneous over the whole country. The main contention of this paper is that there *was* a major change in the second half of the sixth century. Āmrakārddava, grantee of Candragupta II, gave (*F* 5) in the year 412–13 a village and 25 *dīnāras* to the monastery at Sanchi (*Kākanāda-boṭa*). He salutes a 'Council of Five', which takes no part in the transaction and must have been—as we shall see later—a senate of merchants who acted as witnesses and guarantors for the donation. Ten monks were to be fed daily and two lamps lighted in perpetuity from the total income. The lady Harisvāminī, a lay follower, donated 12 *dīnāras* to the same monastery in 450 (*F* 62) as a permanent fund (*akṣaya-nīvī*) to feed one monk daily, with four *dīnāras* more for four lamps to be lighted in perpetuity. Assuming no change of local prices or interest-rates in the 38 intervening years, it follows that the state's sixth portion of the grain harvested at Īśvara-vāsaka village which had been transferred by donation to the monastery would be equivalent to the annual interest on about 97 *dīnāras*. It is also clear that Buddhist monasteries still ranked as leading financial houses in the fifth century. The great monasteries along the Deccan trade routes had certainly functioned from about the second century BC as banking houses and major customers for the trade in valuable commodities then transported over long distances by traders' caravans. However, the wealth accumulated in monastery and temple tended to be frozen in jewels, precious metals, and bronze. This progressive withdrawal from circulation naturally became a hindrance to production and exchange, particularly at the stage when village settlement began to expand at a rate which gave new importance to trade in necessities. A change was certainly due. The producers' guilds were still good investment brokers in the fifth century. For example, the oilmen's guild at Indor (Bulandshahr district, U.P.) headed by one Jīvanta accepted money in AD 465 from a brahmin Deva-viṣṇu (*F* 16); the interest was to be used in perpetuity for the annual supply of a specified quantity of oil for the temple lamp. This trust was to continue even if the guild changed residence, provided it functioned as one unit. The prominence of the head-man is a new feature which was to be accentuated with time.

It seems to me that the same profound structural change is best reflected in the use of the word *sāmanta*. In the *Arthaśāstra*, it means uniformly neighbour or independent neighbouring king. The *Amarakośa* (2.8.2) defines 'supreme monarch' (*adhīśvara*) as a king who has subjugated all neighbouring rulers (*sāmanta*) without exception: *praṇata-aśeṣa-sāmantaḥ*. On the other hand *sāmanta* in seventh century and later epigraphs has to be translated as 'feudal baron'. That the change was complete rather late in the sixth century is proved by the fact that Dhruvasena I of Valabhī, on friendly terms with the Guptas but virtually independent and certainly not their vassal, bore the titles *mahārāja-mahāsāmanta*, in AD 526. The latter designation, corresponding perhaps to the earlier *mahā-kṣatrapa*, was soon dropped by his successors. At about the same time, however, Yaśodharman of Malwa (famous for his repulse of the Hun raider Mihiragula in AD 532) boasts (*F* 33) of having struck down the pride of *sāmantas* (= surrounding kings) by the power of his arm. This exemplifies the process described elsewhere[7] as 'feudalism from above'. It follows that the *Amarakośa* is earlier than historians of Sanskrit literature like Keith would like to admit; placing its author at the Gupta court in the fifth century would be reasonable. This would also push the date[8]) of the poet Bhartṛhari down to a period not earlier than the late sixth century.

Administrative decentralization through *sāmantas* accelerated the conversion of communal property into feudal property. Local chieftains were transformed into barons responsible to the king retaining their former rights, but as few as possible of the obligations to their own followers. High officials and legates who would have received a regular stipend under the Mauryans also became such barons or were assigned the state's revenues of some land for stipend. The army was broken up into small police garrisons; the king maintained just enough under his direct command to be able to dominate all the rest. Actual use of currency per head of population was unquestionably far less than under the Mauryans, as indeed we learn from Chinese pilgrims' accounts. The agriculturist paid his tribute of one sixth in kind to the king. The trader converted enough of it in cash to enable the state to meet its obligations. Such a system cannot work unless the density of village settlement rises to a sufficient but not too high level. The village by itself is a poor foundation for such trade; its surplus has to be securely concentrated in relatively few hands. Thus trader and lord supplemented each other, whether or not they were conscious of the fact. All this would give a special position to the new *vaṇig-grāma* which alone had the accumulated capital necessary to finance the petty trader and the caravans. They would thus take over the surplus from the peasant as well as the feudal lord, supplying household goods to the former and luxuries to the latter, at the period when growth of new village settlements was rapid.

2. Here, the greatest of the published charters is re-translated. The numbered clauses have been grouped subjectwise in paragraphs. Each paragraph is followed by special comment wherever necessary. It must be noted that every clause of the charter relates in some way to the merchants. Thus it is clear that, even in no. 24, the peasants who come to town for seed would go to the merchant, and not to some landlord.

Points to be specially noted are: First the considerable incidence of commodity production centred in the town, under the merchants' patronage: wine, sugar, indigo, ginger, oil, woven cloth and clothes, pots and vessels, articles in wood, iron and leather etc. But the merchants themselves are no longer guild producers, only people who finance and thus control the production. Secondly, the state regulated prices (as in *Manusmṛti* 8.402), and checked weights and measures (as in the *Arthaśāstra*), and collected taxes or corvee labour (*Manusmṛti* 7.138). However, dues and fines are assessed in cash, not produce or penal labour. The standard coin is a *rūpaka* (*R.*) divided into twentieths, and old ancestor of the rupee. The *dhārmika* is interpreted by Sircar as a specially low rate of tax when the goods are for religious purposes; this would be ridiculous when applied to wine-vats (42) and fines (33) for tampering with seals. The *dhārmika* is the equivalent of the *zakāt* (alms) tax under the Muslims. In practice, it was merely a surcharge levied as for charity, though never specially applied nor accounted for as such. It is surprising to discover this to be a pre-Muslim institution in India.

Charter of Viṣṇuṣeṇa (the Maitraka Viṣṇubhaṭa) dated AD 592, to a merchants' settlement in Gujarat (*EI*. 30.163–81):

1) The property of one (who has died) sonless is not to be attached (by the crown, but disposed of according to guild rules). 2) The king's men are not to break into a house (*ummura-bhedo*). 3) A lawsuit without proper attestation is void. 4) No arrest upon (mere) suspicion. 5) A woman is not to be apprehended for (her) man's transgression. 6) No prosecution (*chalo*) to be held for the accidental spread of a fire lighted for (normal) beneficial purposes. 7) No prosecution to be held for the self-mutilation of an ear. 8) No process is valid without a party of the first part and respondent of the second part. 9) No prosecution to be held of one seated in the shop (*āpaṇa*, busy with his sales; *cf*. no. 21). 10) A bullock cart is not to be attached.

Mirashi translates *umura-bheda* first as 'distinction of wharfs', and then (in the index) as 'forcible breaking of a house'. Sircar seems to connect *ummura* with *unmudra*, apparently in reference to a house sealed in the owner's absence. The simplest modern equivalent seems to be *umbarā* or *umbaraṭhā*, threshold. Clause 2 thus guarantees the merchant's house against unwarranted trespass by royal officials. *Āpaṇa* in 9 is not a shop in the modern sense, but any place, even a temporary enclosure, where the merchant bought, sold (and may have stored) his specialized merchandise. Otherwise the modern word *dukkān* for shop need not have been borrowed from Persian.

11) If a baron (*sāmanta*), king's legate (*amātya*), or royal envoy (*dūta*) should turn up, they have not the right to billets, quarters, or cooked food (as prerogatives, from members of the guild, who are thus exempted from ordinary feudal dues and perquisites).

12) All guilds (*śreṇī*) are not to pay the single-market-tax (*ekāpaṇakaḥ*) 13) All guilds are exempt from the *khovā*(?) gift. 14) Royal perquisites (generally in kind) are to be given to members of the royal household, or to authorized officials, not to others. 15) Deposits (*nyāsaka*, of royal dues?) are not to be made with the guild-alderman (*vārika*). 16) A merchant come upon legitimate business from a foreign district is not to be apprehended, merely because he is suspect as a foreigner (of encroaching upon local privilege; *cf*. no. 52).

The term *vārika* implies holding the office in rotation, perhaps from day to day, presumably so that all the leading families might share the prestige and the responsibility by turns.

17) No complaint is acceptable without a personally afflicted complaint. 18) The *sārī* (? bondswoman) is not an admissible witness in cases of injury by words or by violence.

Sircar takes *sārī* as *sārikā*, a (female) talking-bird. Having one as witness in the courts would be fantastic even for the Arabian Nights. Unless some debt-slave like the hārī is meant, emendation to *bhārikā* (*cf. M*, p. 158) is called for. The rejection is then of a poor drudge whose testimony would be subject to bias or pressure.

19) Workers at (brown-) sugar boiling pans (*dheṅku-kaḍḍhaka*) and at indigo vats (*nīla-ḍumphaka*) are exempted from corvee labour (for the king, in lieu of taxes, because the establishments are taxed as in 49, 48). 20) Attendants for filling (charitable) drinking-water cisterns (*prapā*), and herdsmen (working for the merchants) are not to be apprehended for the king's (forced and free) labour.

21) Those engaged (in their business) at home or at the shop are not to be summoned (to court) whether by a sealed document or messenger (*cf.* no. 9). 22) Those engaged in a sacrifice (*yajña*), *sattra*, marriage ceremony and the like are not to be summoned to answer in a civil suit on behalf of others. 23) In a debtor's suit, one not fettered by wooden or iron fetters (i.e. not under restraint as a criminal) is to be allowed bail on furnishing a surety. 24). Peasants come (to the market town) from their own district at the (beginning of the) rains for (purchase of) seed are not to be seized by the lord (for labour on his own estate).

25) Weights and measures are to be shown for checking in the months of *Āṣāḍha* (June–July) and *Pauṣa* (December–January). The (certificate) fee is R. 1¼ inclusive of tithe surcharge (*dhārmika*). 26) For financial transactions in undeclared goods, acceptance or clearance of (untaxed) grain and the like, a fine of eight times the value of the goods (smuggled) is to be imposed. 27) The shopping-quarter (*peṭavika*) guild-alderman (*vārika*) is to publish the roll of (fixed) prices every five days; for failure to publish, a (fine of) R. 6 plus a tithe surcharge of R. ¼. 28) The guild-aldermen (*vārika*) from the leading families (*uttara-kulika*) are not allowed to go forth (from the district) if the authorized stock-list should be lost. 29) If the guild-aldermen from the leading families do not turn up before the registrar after the (registrar's) attendant has called out their names thrice, the default is punishable by a fine of R. 2¼ inclusive of tithe. 30) The recorders of processes and registrar's servants (apparently to be

furnished by the guild-merchants) are liable to a fine of R. 6¼ inclusive of tithe for not remaining present (at the registrar's court) till noon and after. 31) (However), the guild-aldermen from the leading families are not (liable to) prosecution (for absence from the registrar's court) beyond noon. 32) For charging prices beyond (those on the roll of no. 27, the fine is) R. 3¼ inclusive of tithe. 33) For tampering with a seal (i.e. sealed document, presumably licence or roll), the fine is R. 6¼ inclusive of tithe.

34) For a dispute regarding real estate resolved by the neighbours (without appeal to royal courts), the fine is R. 108. 35) If, however, due information be given (to royal officers), R. 54. 36) To the winner of the suit (thus settled out of court), a certificate is to be issued against a fee of R. 3¼.

37) For knocking (another person) down and dragging (him or her) along, or for cutting an ear, the fine is R. 27. 38) For verbal injury or injury by violence (beating), R. 6¼ as fine. 39) If (permanent) scars are visible (as a result of the beating), R. 48. 40) For damage by cattle mouthing (*taundika*: the mouthing of market-goods, a fine of) R. 5/20. 41) For buffalos, twice the above (as the buffalo has not the cow's sanctity!).

42) For the inspection of wine-barrels (or vats, a fee of) R. 5. 43) For the first (use of a) wine-vat, the official's fee with tithe is R. 2½. 44) But if one brews a second day without declaration, twice the above is to be imposed. 45) For inspection of a wine-distillery (a fee of) R. 3 (an additional) tithe of R. 1¼ and, as royal perquisite, two quarter-measures of wine.

46) The (royal share of) bell-metal utensils is accepted at the (royal) warehouse after mass inspection and weight-checking, on *Āṣāḍha* fullmoon. No (other fee at the (royal) warehouse. 47) At the royal storehouse, the distillery-*vārika* has no obligation to do any work beyond measuring out and delivery of the measure (due to the king) by ¼ *śoṭī* pots.

48) Indigo-vat dues payable by the dipper (*ḍumphaka*) are R. 3. 49) For a sugar-cane depot (the dues are) R. 32; tithe (an additional) R. 2¼. 50) for a wet-ginger depot, half the above. 51) For an oil-mill, R. 3; tithe (an additional) R. 1¼.

52) Merchants who have come (from a foreign region) only for shelter through the rainy season are not to be charged import duty (and immigration tax); but export duty (and emigration tax, are to be charged on leaving; *cf.* no. 16). 53) The frontier customs duty on a carrier-load (*vahitra* = boat-load or large car-load) of trade-goods (*bhāṇḍa*, which means pots and vessels also) is R. 12; (in addition) a tithe of R. 1¼. 54) For a buffalo-load (of trade-goods) or a camel-load, R. 5¼ inclusive of tithes.

55) (Frontier) dues on a bullock-load (of trade-goods) R. 2½; tithe (in addition) R. ¼. 56) (Frontier) dues on an ass-load (of trade goods) R. 1¼ inclusive of tithes. 57) Half the above for bundle-packs (such as head-loads); for loads suspended (from a pole across the shoulders), R. 5/20.58) For (a light load of) 100 *palas* (about 8 pounds) R. 2/20 inclusive fo tithes. 59) (The frontier duty) for grain is at half the above schedule for trade-goods. 60) The frontier duty for a crate of ginger is R. 1¼ inclusive of tithes. 61) For a boat-load of bamboos, R. 6¼ inclusive of tithes. 62) No duty is to be levied on grain carried on the shoulders (presumably as for the bearer's personal food-supply). 63) From (consignments of) cummin-seeds, black mustard seeds, and coriander seeds, merely a sample of a double handful may be taken (as frontier duty). 64) There is no (frontier) tax to be charged on (people crossing to attend) a marriage, *yajña* sacrifice, pilgrimage festival, or a lying-in- ceremony. 65) For a bridegroom's procession, the frontier tax is R. 12; in addition, a registry-tithe (*paṭṭa-dhārmika*) of R. 1¼.

66) The duty on a (large) load of wine (i.e. boatload or cartload) is R. 5; tithes R. 1¼.67) For a skin of wine R. 1¼. 68) For (wine loaded in a jar, half the above. 69) For a quarter-sized jug, R. 5/20 inclusive of tithes. 70) For vinegar (or bitter wine, the royal dues are) 3 quarter-measures of rum (*sīdhu*).

71) The tailor, weaver, shoemaker are (in lieu of taxes or corvee) to supply the royal household, each according to the nature of his work, at half the rates prevalent over the countryside. 72) The blacksmith, sawyer, barber, potter, and the like are to be put to corvee labour by the (respective) *vārika* (in lieu of taxes).

The royal privilege of paying a lower price for craftsmen's work is characteristically feudal, and was later claimed by the barons as well. Clause 24 shows that the peasants of the hinterland were beginning to be held arbitrarily by the feudal lords for corvee labour. The artisans in 72 were no longer the unattached, free wage-workers or guildsmen of earlier days, nor yet the privileged members of a self-sufficing village community; they must have rendered agreed services to all residents of the corporation area, but not against regular taxable cash payment for each performance.

3. A rise in merchant prestige is visible in the second set of plates of Cālukya king Bhojaśakti found at Anjaneri near Trimbak in the Nasik district. The date is about AD 710.

(M. 159) 'Be it known to you (all) that the previously deserted (*utsāditam*) Samagiripaṭṭana with the triplet (of smaller villages) Ambeyapallikā—Savāṇeyapallikā—Maureyapallikā has been resettled by me. It has been bestowed upon the entire Corporation (*nagara*) led by the *śreṣṭhī* Ela and the *śreṣṭhī* Karapuṭa. The merchants resident at Samagiri have no tolls throughout the realm as long as sun and moon shall endure. Furthermore, there is (to be) no confiscation (by the crown) of property (of one dying) sonless. No house-trespass (*umura-bheda*) by, nor rations allowance for, royal officials. For violation of a virgin (a fine of) R. 108. For seduction, R. 32. For cutting off an ear, R. 16. For cracking a head R. 4. For any merchant's son assaulting (sexually) a porter-woman (*bhārikā*), R. 108 (fine). The verdict reached after due deliberation by eight or sixteen senior men of the Corporation will be final. This has been posted by śrī-Tejavarma-rāja'.

This compares with the charter in the preceding section. The *rūpaka* is now explicitly defined as the silver coin of Kṛṣṇarāja. The whole town consisted of the merchants and their dependents. Hence the word *nagara* is used in the double sense of a traders' and a civic corporation. The merchants were given the right to trial by a jury of their own seniors. The *śreṣṭhīn* had now a special position, and indeed such an association would inevitably be dominated by the richest among them, subject to the need for inner solidarity. The first set of Anjaneri plates (dated 710) confirms this position of the merchants. The word *nagara* there must also refer to another such corporation, at Jayapura. Otherwise, the plates make no sense. For, money and village revenues had been donated by the king for a temple, but not in charge of any priest. Instead, the *nagara* merchants are asked to select five or ten of their number, 'according to the usage of the *nagara*', to supervise the great annual festival of the god, which would be attended by many pilgrims from afar and lasted a whole fortnight in the mouth of Mārgaśīrṣa (December). The administration of the temple estate, including disposal and investment of the revenues, was left in trust with the entire *nagara*. Tejavarman adds a colophon to the plate where he 'releases a meadow in Palittapāṭaka to the south of the (merchant corporation-town of) Jayapura. In compensation (*niṣkraya*) of the god Bhogeśvara's land, to the Jayapura merchant-Corporation R. 100 have been given. The interest of that hundred is the price of incense (*guggula* = bdellium) to be given annually in perpetuity (to the god) by the Corporation'. The pasture land was not in Jayapura. Just what did Duke Tejavarman mean by relinquising the land and then paying R. 100 compensation, whereof the merchants should devote the interest to supplying the temple? The only explanation is that this land would have to be used by some tenant and pay royal dues, which Tejavarman had not the right to excuse or transfer; so passing on the nominal ownership to a distant *nagara* would profit nothing. On the other hand, if the money were given to the state (as in most feudal grants) in commutation of taxes, there would be no incentive for the merchants and the profits might be uncertain from year to year, so that the donor's merit could not be guaranteed.

The sixth *ucchvāsa* of Daṇḍin's *Ten Princes*[9] bears testimony to this higher position of the merchants in independent settlements. We need not discuss the authorship of the *Avanti-sundarī-kathā* and the *Kāvyādarśa*. Both the *Pūrvapīṭhikā* and the *Uttarapīṭhikā* are to be discarded. What remains is still a masterpiece of Sanskrit literature. Its sparkle, verve, gusto, controlled flamboyance, penetrating but subtle humour, gentle irony, command of expression, and acquaintance with a broad cross-section of life would qualify it in any language as an outstanding work. The period familiar to the author could not be far from the seventh century, and should undoubtedly be placed before the influence of Bāṇa withered high Sanskrit prose. The word *sāmanta* is used throughout the work in the feudal sense. The stories are not told as of the long-vanished unfamiliar past. The localities where the merchants were supposed to reside namely Bhāvnagar, Sūrat, Mathurā and Ujjain might be chosen as handy names. But it is clear that merchants travelled over long distances, not only for trade but to choose a bride. In the story within Mitragupta's narrative, the merchant Balabhadra, accompanied by his wife and a slave-woman of all work (*paṇya-dāsī*) bought on the way, settle in a hamlet (*kheṭaka-pura*). This must have been a trade centre, for 'Even in that small place, Balabhadra, a shrewd business man, multiplied his modest capital into a great fortune. He was accounted the leading citizen (*paura-agraṇī*), and had a household of dependents suited to his wealth.' When the servant-woman lodged information upon a supposed criminal charge against him, the king's sheriff (*daṇḍa-vāha*), who hoped to gain from the confiscation of Balabhadra's property, had him brought before the merchant *śreṇī* for trial. That is, the royal officer had not normal jurisdiction over a merchant, even over one suspected of the abduction of some girl. Similarly in the next story of the same *ucchvāsa*, where the picaresque hero agrees to confess only before the *vaṇig-grāma* as to how he came in possession of an anklet lost by the epicene merchant's wife. That is, the *grāma* here is merely the older term for our *nagara*, which was its logical extension with the merchant's rise in status.

The question that remains is why this trend did not continue (as in Europe) to the full course of bourgeois development, though individual merchants became rich. Various reasons spring to the mind. In particular, caste, which prevented the merchant class from having relatives in the administration and the army; foreign conquest by Muslims who valued trade, but were not allowed usury by their canon law, and could never come to satisfactory terms with idolaters. The Hong merchant guilds of China wielded far more power than their counterparts in India. But then, the Chinese merchant normally had landlord relatives, a cousin or two in the imperial service as Mandarin, and could belong to the same *wei kuan* provincial union as they. That is, the merchant's class basis was broader in China than in India. In fact, the merchants in China played a leading part in the creation of the first unified state under Chin Shih Huang-ti in 221 BC; one of them was its first chief minister. The corresponding Mauryan state under the brahmin minister Cāṇakya showed draconic measures against the merchants. The basic answer, naturally, is that village production had conquered in India. Where most of the produce was consumed in the village, and where the artisans were also the special village craftsmen; i.e. village potter, village carpenter, blacksmith, leather-worker, etc., commodity production and village purchasing power were both at a minimum. Thus, the merchants tended to congregate at port towns—which always trembled in the shadow of the great inland kingdoms—or at the major emporia. It is notable that none of the charters nor the extant Sanskrit literature gives *nagara* privileges to merchants at or near the capital of any kingdom. The workers' guilds disappeared, so that the merchant could hire enough workers for his goods to be turned into a commodity with greater sales value. But when artisan guilds no longer existed as a power with which even princes had to reckon, merchants were at the mercy of feudal lords who controlled the surplus and who were the major purchasers of the costliest merchandise. The very success of a virtually closed village economy struck at the roots of proper bourgeois development.

The ease with which the country fell to successive invaders is explained by the helplessness of carefully disarmed villages with their consequent indifference to change of masters. The extreme rigidity of caste was just one more manifestation of the general 'idiocy of village life'.

The merchant's influence shows in certain new departures. In *M* 369–74, dated AD 1212, the sons of a king's priest surrendered the entire annual income from the village Alaura in Rewa to one Dhareka who had risen to the rank of Rāṇaka from a lower (*Ṭhakkura*) feudal landlord family. That the original title derived from a royal grant, presumably to the dead father, seems obvious from the royal seal affixed to the copperplate deed, which was executed in the presence of high officials (cited) of the ruling king Trailokyamalla Candella. The king's assent to the transaction is thus implied. The original royal grant could not bestow more upon the family than the state's rights to taxes and perquisites (including fees for any future settlement of uncultivated land) in the village. These rights were transferred from a priestly family to a feudal lord who was not a brahmin, though brahmins could be *ṭhakkuras*. Not only is this unique, but the reason for the transfer is even more striking: default on a mortgage, *vitta-bandha*. The 'Council of Five' whereby 'merchants adjudicated such financial affairs according to their custom' is explicitly mentioned in the deed, so that the pledge was forfeited in accordance with merchantile law, and not feudal usage.

NOTES

1. *EI* = Epigraphia Indica; *JBBRAS* = Journal of the (former Bombay Branch of the Royal) Asiatic Society of Bombay; *F* = J. F. Fleet: *Inscriptions of the Early Gupta Kings* (Calcutta 1888, *Cor. Ins. Ind.* III), cited by number of the inscription; *S* as in note 2) below and *M* as in 3), both cited by page.
2. D. C. Sircar in *EI* 30, 1957, 163–81; earlier, in the proceedings of the Bombay session (1949) of the All-India Oriental Congress (translation).
3. V. V. Mirashi's edition of the *Inscriptions of the Kalachuri-Chedi Era* (New Delhi 1955, *Cor. Ins. Ind.* IV), particularly p. 150 ff.
4. On the right 13th pillar; *cf. JBBRAS* 30, 1956.66 (*Dhenukākaṭa*).
5. W. Rau: *Staat u. Gesellschaft im alten Indien* (Wiesbaden 1957), 51–4.
6. *EI* 8.82–4 &c.
7. D.D. Kosambi: *[An] Introduction to the Study of Indian History* (Bombay 1956, chapters 7, 8, 9).
8. By the stanza beginning *bhrātaḥ kaṣṭam aho* in the northern and *sā ramyā nagarī* in the southern version (no. 169 in the critical edition, *Epigrams Attributed To Bhartṛhari*, Singhi Jain Series 23, Bombay 1948). Here, *sāmanta-cakra* can only mean—in the context—the highest nobles of great king's court.
9. The current Nirnaysagar edition and Ryder's elegant translation (modified as necessary) of the *Daśa-kumāra-caritam* have been followed.

31

An Inscription at Palasdev of *Śaka* 1079*

1. The inscription. The village of Palasdev on the south bank of the Bhima river lies two miles by cart-track to the north of the 72nd milestone of the road from Poona to Sholapur. The houses of the village within their ancient circumvallation are situated in the angle made by the river and a tributary brook from the south. To the west, across the brook, is a considerable walled precinct containing two adjacent temples, well constructed of stone in the twelfth-century Yādava style. One of these is of Mahādeva; the Paḷasdev or Paḷasnāth proper and the senior cult of the locality; the other, almost touching it, is for Viṣṇu. The same walled enclosure contains a dilapidated *dharmaśālā* for pilgrims and several rustic cults of uncertain date, plus fragments of older construction. The only known inscription here is in the temple to Viṣṇu in the enclosure. It was noticed by the late V.K. Rajvade, who had a plaster cast made. The efforts to trace his complete reading, if he gave one, have not been successful nor is the cast to be found. The pieces of plaster still sticking to the graven letters make it unlikely that the said plaster cast was of much use. A report of the Bhārat Itihās Saṃśodhak Maṇḍaḷ of Poona shows, however, that the name of the donor and the *śaka* year had been deciphered. As the epigraph is interesting for entirely different reasons, the text as read directly on the site and corrected from rubbings is given below. The script is good twelfth-century *devanāgarī*; the body of the letters is one centimetre in height; the two lines of the inscription are 49 centimetres in length. The language is Marāṭhī, compatible with the date given.

Text: (line 1) | Śrī Caṃgadeva daṃḍanākeṃ Viṣṇu-gṛha keleṃ | Iśvara saṃvacharīṃ nīphajaleṃ | prāsādī ghasayala avajñā tehāce putra bhāīyā | ghantā (line 2) titthatī soneyā sāhasru eku 1000 prāsāditra

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Journal of the Asiatic Society of Bombay (New Series), vol. 38 (1963), pp. 69–73.

akara-vātottare bhūmi 100 daüpa-sāü ghā dinā śaku 1079 maṃgala mahasī |

Traslation: By Śrī Caṅgadeva (the) army captain was made (this) House of Visnu. (The work) came to fruition in the year (named) *īśvara*. Whoever should deface or (otherwise) insult (this) temple, his sons are his brothers. A bell, . . . a thousand 1,000 pieces of gold and 100 (measures) of land free of taxes and dues have been given to (this) temple. *Śaka* (year) 1079; great blessings (upon all).

2. Commentary. The punctuation of the original has been followed in translation. The captain's title should be *daṇḍa-nāyaka*, but the shortening of *nāyaka* to *nāka* is still a feature of Marāṭhī names, especially for the lower castes such as Mahār, e.g. Śidnāk. Eventually, the title became hereditary, separated from actual command of army or police units, apparently developing into *daṇṇāyaka* and later the surname Daṇāita. As no king's name is mentioned, one can only conjecture that Caṃgadeva held his remunerative post under the Yādavas. The year is March 20, 1157 to March 10, 1158 according to L.D. Swamikannu Pillai's invaluable *Indian Ephemeris* (vol. 3, Madras 1922); the name of the year, *Iśvara*, tallies with the nomenclature according to the southern sixty-year cycle.

The precise nature of the gifts is not too clear. It is difficult to believe that the bell (written *ghantā* for *ghaṇṭā*) was worth a thousand pieces of gold. This assigns a qualificatory sense to what has been read as *titthatī*, the middle ligature being rather doubtful. Probably, a fund was established for bell and bell-service. The gift of land is clear and a standard procedure. That the unit of measure, limits of the gift, and the immunities implied by *a-kara-vātottare* have not been specified in detail implies that the main purpose of the inscription was not to record the gift of land. Nothing is known of the temple having enjoyed any such gift, which should have been—and probably was—exactly recorded in a charter engraved upon a copper plate. It would have been rescinded in any case by the Bāhmani kings. The concluding words are current vernacular for *maṅgala mahāśrī*, a normal benediction for such work at that period.

What sets this particular record apart from the usual temple grants is the third sentence. This is a curse not generally known upon anyone who might defile the shrine. The words *tehāce putra bhāiyā* 'his sons are his brothers', mean simply: 'he has violated his own mother'. This is a peculiarly rustic obscenity, equivalent to the modern *mādar-coda* or the Chinese peasant's *mā-di-ke-pi*, but much stronger in the context. The only possible reason for this peculiar execration is obviously the proximity of the Viṣṇu temple to one of Mahādeva, the senior cult of the real Paḷasnāth. There is no corresponding inscription on the Śiva temple, which is built in virtually identical style, slightly larger and perhaps a bit more ornate. That the Viṣṇu temple needed such protection means that damage was to be feared. There are several other undamaged cults in the temple enclosure, including one of Hanumān, some funerary monuments to feudal cavaliers, a *satī* or two and a comparatively rare representation of the ten *avatāras* of Viṣṇu (sometimes taken to be the *nava-graha*) not in active worship. This should have found place in the Viṣṇu temple, say as a lintel. The only visible damage to the Viṣṇu shrine is that the brick-work spire has collapsed through natural causes to a heap of rubble on the flat stone roof. This has had no ill effect upon anything actually in the flat-roofed temple and shows only that the economic power to keep more than one building of the whole complex in good repair has been lacking after the days of the Peshwas. The sole plausible conclusion from all this is that Viṣṇu was a rival and deliberate intruder, when his temple was constructed almost touching that of Śiva. Otherwise the 'House of Viṣṇu' could easily have had a separate enclosure, or have been built on the other side of the stream like the many other beautiful though now decaying shrines of the Yādava period in Paḷasdev village.

The importance of the Paḷasdev inscription, short as it is, derives primarily for its being a surprisingly early, dated, palaeographic testimonium for the *smārta-vaiṣṇava* controversy which split the upper layers of Hindu society in the later feudal period.

3. The *Bhīmā-Māhātmya*. The only known supplementary written evidence with which the archaeological find might be collated seems to be a feeble, but not uninteresting document, the *Bhīmā-māhātmya*. The inhabitants of Paḷasdev referred me to this, but the sole copy available was a *MS*. in the Bhandarkar O.R. Institute's (Government of Maharashtra) collection, no. 172 of 1884–87. This is labelled *śrī-Padma-purāṇāntargataṁ Bhīmā-māhātmyam*; a codex of recent calligraphy, obviously written by several different people and put together, with renumbered folios, to provide a unitary document. The published *Padma-purāṇa* does not have any such section. The purpose of the collection was to label and exalt places of pilgrimage (*tīrthas*) on the Bhima river. The names of the places are easily identified with actual locations on the river: *aśvandyāḥ samgamaḥ* in the 30th *adhyāya* is the junction of the Bhīmā and the Ghod rivers; the Śiva-tīrtha of the 26th is at Peḍgāo. The Siddha-tīrtha of chapter 29 is Siddhatek, today the one really famous place of pilgrimage on

this river. The order of description is down-river, from the origin at Bhīmā-śaṃkar.

Paḷasdev comes as Palāśa-deva or Palaśa-deva, in the 31st *adhyāya*, folios 88*a*–89*b*. The story is that the gods and the demons fought on the banks of the Bhīmā, the gods winning by favour of Palaśanatha. So, the *liṅga* phallus was set up as a cult. Then king Nahuṣa turned up, made 99 great *yajña* fire-sacrifices and became Indra. Wishing in lust to possess the wife of the real Indra, he hitched the sages to his chariot, kicked them to move faster and was cursed by Agastya to become a snake. So far, this is the standard Purāṇa story, transposed to the banks of the local river. The interesting detail is added in stanzas 30–31 of this *adhyāya*: that the king, become a snake, occasionally emerged from his hole and was seen by exceptionally fortunate men at Palaśadeva.

The local people point out the place of Nahuṣa's *yajña*, now in ploughed fields to the south of the village houses, on the same side of the brook. The proof that *yajña* was performed at the spot is—according to the peasantry—the occasional bits of old-time pottery that the plough turns up. The Nahuṣa snake was last seen about three generations ago by the headman of the village on the threshold of the temple. That he has not appeared since is taken to indicate his release from the curse. As for Paḷasnāth-Mahādeva proper, the peasants' story is entirely different from the pseudo-purāṇic report. One of the villagers saw that his cow regularly released her milk below a *palāśa* (Butea frondosa) tree, dug there and found the natural stone which he then set up as a *liṅga* of Śiva. Such aniconic baetyls are common enough, as is the standard method of their revelation in a dream or by some petty miracle like the one related here. The guardian cobra of the locality also follows a standard pattern, though never elsewhere related to Nahuṣa. The moral is that collation of local finds with the Purāṇas, which ought to have been a standard procedure for investigation, will not give anything of value to the historian. Though written to order, such Purāṇas rarely condescend to look at, let alone describe reality of any sort.

Finds of pottery at other *yajña* sites (*e.g.* Bāmaṇ-thal beyond Indāpūr) in the valley come to the twelfth century AD. A few older loci known as Gavaḷī ruins have cruder and older but as yet undated ceramics. Paḷasdev, whose last major shrine is dated AD 1157 must belong to the older settlements, with continuity from prehistory. Just outside the village and opposite the Paḷasnāth temple is a microlithic factory site, near the cult of Saṭavāi, rustic goddess of childbirth. The Kāḷubāī stone a little further south belonged to some shattered megalith, as proved by the graven oval line. The engraving also marks a few other stones re-used for embankments and construction, as may be seen on the village wall on the riverside and by the Rāma temple. Across the Poona-Sholapur road, but still in Paḷasdev village limits, is another excellent microlith site on the eroded banks of the stream. Also of archaeological interest is the Paṭhāṇ Burj, a stone tower about 12 feet high, built without mortar. The lower courses are of unshaped boulders, the upper of roughly dressed smaller rocks. A cult has been set up on the eastern face, but not at the top which is inaccessible without a ladder eight feet high, at which level steps begin on the north face. The structure is solid and isolated, in the form of a watch-tower; it is much older than the Muslim period in this territory. The original Paḷasdev village (nearly three miles by road from the present site) was by this tower, according to local tradition; but the bare, eroded ground shows only some crude microliths, so that the early settlement must have preceded the use of stone for houses. All these sites should be investigated by excavation, along with the plateau known as Ḍhagobācā Māḷ, also a microlith site with a curious, domed, medieval one-room structure which is neither shrine nor tomb and certainly not a residential building though flanked by ruins that may have been houses. Special attention may be called to the underground passage which is now collapsed and sealed off but which once enabled the Paḷasdev villagers to go under the brook to the Mahādeva and Viṣṇu temples even during the rains; they now use a boat for the monsoon season.

4. A previous reading: Dr. M.G. Dikshit (*Marāṭhī Saṁśodhana Patrikā,* vol. 9, pt. i, 1961 October, pp. 13–14) has given a photograph of a rubbing and his own reading of the Paḷasdev inscription, along with some discussion of previous efforts. He reads the date as *śaka* 1078 which is definitely wrong, as the digit 9 is clear while the name *Iśvara* for the year tallies only with 109, not 1078 *śaka*. Our principal differences occur in sentences 3–4 of the inscription, which he reads as follows: *prāsādī basvaṇa ūvajhā tehāce putra bhāiyā baṁbhā niṣpatti soneyā sāhasru eku* 1000 *prāsādiā akaravātottare bhumi* 100 *dāu pasāu bāhilā*.

It will be seen that the principal difference lies in his taking as *ba* what I read as *gha* and which is close to the modern Marāṭhī *dya* (ligature) in form. So far as I know, *ba* at this period is generally written as *va*; Dikshit's reading *bāhilā* at the end of sentence 4 would reverse the procedure for no apparent reason. In addition, the *ghā* of this last word is quite clearly crossed through, perhaps for erasure. The word *basavaṇa* seems justified at first as 'establishment of the image', but that leaves the sentence without any verbs at all; the *ṇa* may be admitted, though it seems to be a slip for *la*, which differs only by a short vertical connecting stroke to the top line. The *ya* is clear, and cannot be read *va.* The initial *ba* is therefore still more doubtful. The worst is the word *bambhā* which supposedly begins the fourth sentence in Dikshit's reading. The *bhā* is decidedly not admissible, as is seen from comparison with the preceding word *bhāīyā*. Dikshit takes *bambhā* and with the *niṣpatti* as some sort of fund for the priest's maintenance. In *niṣpatti*, the final *tti* is not reduplicated; the initial *ni* may be admissible, but the middle ligature is highly doubtful. The meaning would, incidentally be rather obscene if *bambhā* were taken: 'for the begetting of brahmins'. The supposed word *ūvajhā* is definitely misread, for the first letter is precisely the *a* which occurs in *akara-*, and by no means comparable to the two *u* that come in *dāu-pasāu*. The *jhā*, of course, may also be contested, but the point now becomes trifling. We might note in passing the arbitrary reading *valika* for *vaṇika* in another inscription listed on p. 6 of the same paper.

Let me stress again the most extraordinary proximity of the twelfth-century Viṣṇu shrine to an older temple of Śiva, the original brahmin deity of the spot when the primitive cult was taken over.

32

Asokan Pillar: Banaras Mystery*

Some thirteen and a half centuries ago, a Chinese pilgrim passed through Banaras on his way to Sarnath. His reports runs: 'To the north east of the capital (Varanasi), on the western side of the river Varana, is a stupa, built by king Asoka. It is about one hundred feet high. In front of it is a stone pillar, bright and shining as a mirror; its surface is glistening and smooth as ice, and on it can be constantly seen the figure of the Buddha as a shadow.'

The river Barna or Varana has a double bend about this point. The only possible site for a stupa on the other side of the river seems to be the village of Pahari, with its uninvestigated high mound. Hiuen Tsang's narrative makes it clear that the stupa to which he refers was on the Banaras side of the Varana, not the Sarnath side. There is, today, neither a pillar nor a stupa in that bend of the tributary. But one site corresponds exactly to the Chinese account of the stupa-pillar complex, namely the Lat Bhairav, at the margin of the city. This lies a furlong north of the second railway level crossing to the east of Banaras city railway station. Moreover, it is on an ancient though recently surfaced road from Banaras city, the logical route to Sarnath in the early seventh century AD. At the time of the Buddha, Banaras was confined to what is now the Rajghat-Fort area, being excavated by Hindu University archaeologists.

Lat Bhairav

There is a Lat Bhairav octroi post on the road, opposite which is Masjid-e-Lat. The Lat Bhairav proper is on a high, paved platform just behind the masjid, which serves as an Idgah for the mosque. The complex lies between two railway embankments for both of which the stupa ruins would

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**The Times of India*, no. 28, vol. CXXVII, New Delhi, Thursday, 28 January 1965.

have supplied the logical filling and ballast. Usable bricks have naturally disappeared in the various constructions nearby. The Lat Bhairav itself is a shaft about seven feet high, with a small round ball on top. But all that can be seen is the outer metal sheathing coated in the usual sacred red colour. What, if anything, lies below is anyone's guess. The place is a strong focus of Hindu-Muslim tension with a police guard stationed permanently to preserve order between worshippers of the Bhairav, and those who come to the mosque or the Idgah. Of the 170x220 sq ft. of the platform area, about 20 x 20 sq ft. is the Bhairav enclosure. This enclosure plus a little bit more is claimed by Hindus. The case was under litigation when I visited Banaras last year.

Why should the Lat Bhairav be regarded as the site of Asoka's pillar? First, the word Lat is the usual Hindi for all Asokan pillars, and for most pillars in general. Second, people now living claimed to have seen the original pillar below the copper sheathing. Tracing these rumours, it always turned out that the person who saw it was someone else. This is part of the misinformation which every stranger normally gathers during the course of any field trip in India, and which he must sift to get at the small grains of doubtful truth. However, one fact seems to be fairly clear. The high level of the Namaz platform is due to the earth excavated from the large tank which adjoins to the south and which was at times called the Kapal-mochan Kund. When the ground level rose by about 15 ft. after excavation, the top of the pillar, presumably decorated with the animal figure or figures normal to Asokan pillars, came within easy reach of worshippers. The Bhairav priest seemed to think that the shaft and figures were broken by an order of Aurangzeb, and the pieces thrown into the adjacent tank, where they are still supposed to be.

Same Platform

There is a *prima facie* case to be made out for the existence of the pillar. A few feet to the north of the Lat Bhairav proper, on the same platform, there is an old well. The shaft is so narrow that a fat man jumping in would bottle it up like a cork. This is characteristic of wells of the Mauryan and Shunga periods, but not of the later wells. Moreover, the top courses of brick-lining are medieval, with narrow tile-bricks. But eight feet or more below the top, one can still see bricks of an older period. So the pre-christian date of the well seems quite definite.

The ground level has definitely risen. Finally, there are older references to the Lat Bhairav as a pillar.

General Cunningham, in the very first volume of his *Reports* of the

Archaeological survey of India (1862-1865; Simla 1871), was more interested in Sarnath than in Banaras. Nevertheless, his tiny map facing page 104 shows the 'Bhairav Lat' for no apparent reason. This was rather surprising because the modern, generally excellent guide maps of Banaras show neither the mosque nor the Lat, only the tank occurs on the *Banaras Guide Map* (surveyed 1928–30); the Lat would have grid numbers 33503968. As the mosque was certainly not constructed after 1930, this intriguing omission had to be pursued further. Indian libraries being notoriously what they are, I took the precaution of writing also to a friend in London. He verified the references given by Cunningham, gave excerpts and sent photocopies of the maps; I have yet to hear from any Indian sources.

Earliest Map

The earliest known map seems to be by J. Prinsep, later famous for his decipherment of the Brahmi script. This map of 'Bunarus' was published by C. Hullmandel at London in 1922. The Mosque, tank, platform, well and pillar are carefully shown; but the last is given as 'The Lath', without the title of Bhairav. The Rev. M.A. Sherring published a handbook for visitors to Banaras (Calcutta, 1875) which duplicates the account in his earlier book *The Sacred City of the Hindus* (London, 1868). I quote: 'Returning home by the Rajghat road, the traveller should stop for a minute at Lat Bhairo to inspect the remains of an ancient pillar there. At the junction of the Ghazepore road waits the Rajghat Road, to the north of the latter, and about a short mile from the Fort, is a large square tank. On the left bank of which, as on a terrace, stands the lat, or pillar. . . . It is only a few feet high; and is covered with copper sheeting. I endeavored to prevail on the Fakir [*sic*] residing here to permit to lift the copper cap, by removing the plaster which connects it with the flooring below, in order to gain a view of the stone pillar which it now conceals; but so great is the reputed sanctity of this object that my efforts were entirely fruitless; and had I persisted in them, a disturbance might have been occasioned. The original stone column, of which the concealed pillar is doubtless a small fragment, was about 40 feet high and, it is reported, was covered with ancient carvings. This was thrown down by Mohammedans, during a terrible conflict with the Hindu population, in the early part of the present century . . . As there is strong reason for believing that it was one of Asoka's pillars, it would be exceedingly interesting to inspect the remaining fragment . . . It is known that the pillar once stood in proximity to a temple, or in its courtyard; that the temple was destroyed by Aurangzeb; and that on its site, a mosque was erected. . . .'

Brave Enough

The Moharram riots during which the pillar was destroyed were reported upon by Bishop Heber, but digging that report out of his numerous volumes is not task to be lightly thrust upon others. My correspondent, Mr. D.S. Chavda, was brave enough to locate a somewhat later report in *Recollections of Northern India* by the Rev. William Buyers (London, 1848). The fight must have been at the beginning of the nineteenth century and was still remembered as the 'war of the Lat'. The only interesting bit of additional information from Buyers is: 'The Hindus had a tradition that the pillar was gradually sinking, it having, according to reports, been once its height and it was also prophesied that when its top should become level with the ground, all nations should be of one caste.'

On the face of it there should remain enough of the pillar below the Idgah terrace to be worth investigation. If there was an inscription of any sort it must have been in the buried portion, in all probability. I doubt that the entire pillar was destroyed in the Moharram riots; only the part above ground would have been smashed. The easiest solution would be to tunnel under the platform from the eastern side, where there exists an old, disused passage to within ten feet of the Lat proper. Not more than fifteen feet of tunnelling would suffice to locate the stub of the original pillar, if there is one; and to see if it is inscribed. The Department of Archaeology could surely get this much digging done without disturbing the surface, affecting Hindu or Muslim rites or prejudice to the legal title. What has to be done in the national interest could then be decided on the strength of the findings. The Mauryan well and northern Black polished ware postherds found in the locality leave no doubt that the site is ancient, well-worth the investigation. I took considerable trouble in 1964 to bring the case to the special attention of the highest authorities in New Delhi. It is a pleasure to report that I was given a most sympathetic hearing. The danger now is that the whole affair will be forgotten in a mass of official correspondence. The Lat Bhairav pillar should not be buried once again in a further mound of files, sheathed in red tape. The purpose of this article is to see if matters could be expedited by arousing public interest. Surely, the effort is well worthwhile, if India thereby gains a new national monument and removes a long-standing source of Hindu–Muslim tension.

33

Scientific Numismatics*

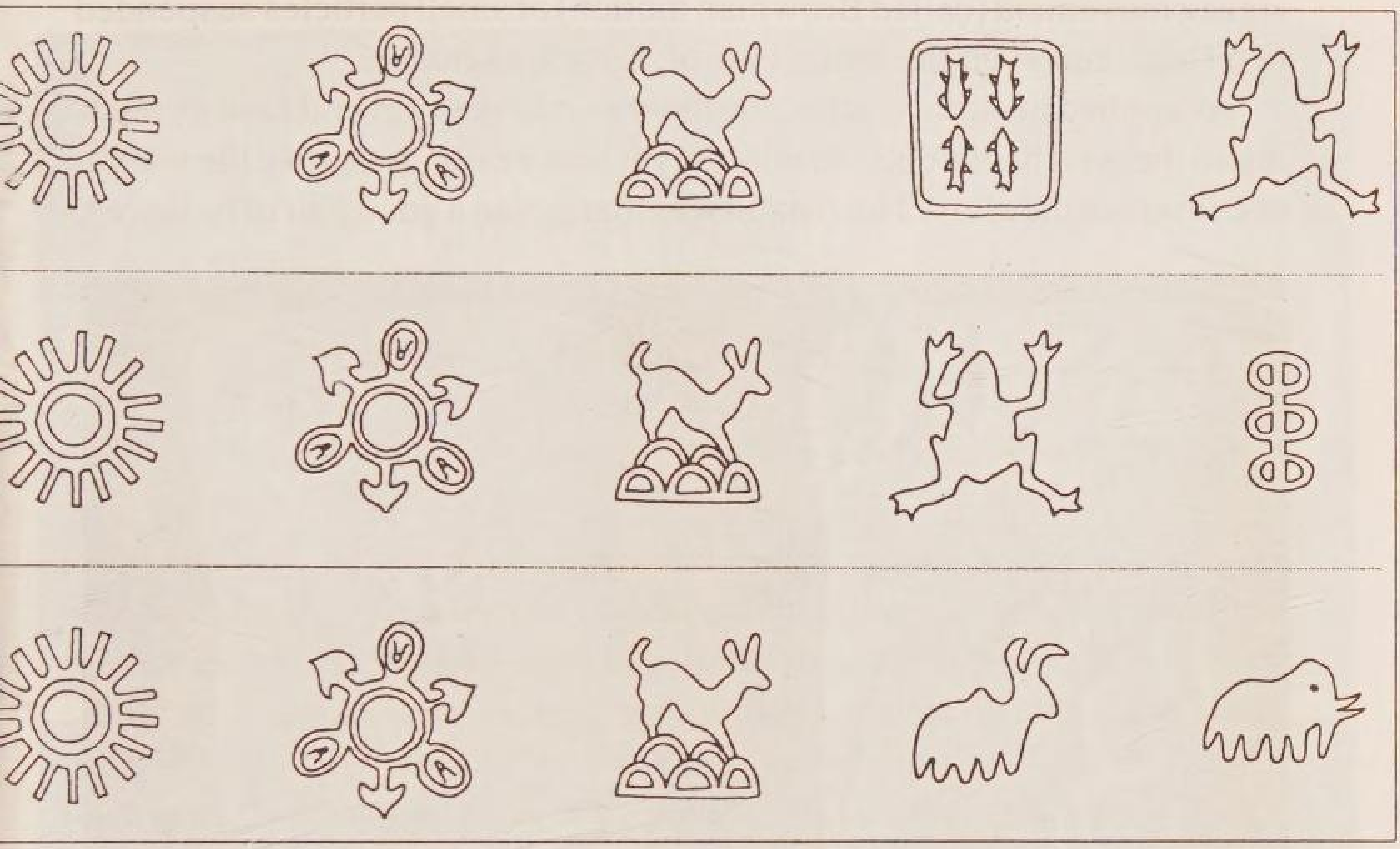
The term 'numismatics' is normally associated with the avocation of collecting coins. It is well known, of course, that the study of coins also plays an important role in archaeology. Here I should like to set forth in general terms a mathematical approach that can make numismatics more of an exact science. With this approach the archaeologist can add a degree of precision to his study of coins, gree of precision to his study of coins, and modern governments can improve the procedures with which they control their coinages and even their paper currency.

The archaeologist finds coins useful because they are normally issued by a governing authority and hence constitute a form of official document. The archaeological value of coins arises from the fact that they survive to an extent unmatched by most other documents, both because they are physically durable and because they have value for the members of the society and so are likely to be put away in hoards. As a result coins have revealed the existence of cities and even kingdoms that are not mentioned in the old literary histories.

Even when an ancient society is known from other sources, coins can be helpful in various ways. Dated coins—or those that can be otherwise identified with a particular epoch—help the archaeologist to fix the age of the level in which he is digging, to organize the chronology of rulers and to establish the dates of events commemorated by certain coins. The designs on coins reveal something of the society's religion or mythology and reflect the evolution of its art. Often the only indication of what prominent persons of ancient times looked like is provided by the portraits on coins.

This kind of information is obtained from coins by the scientific techniques of description and classification. A somewhat more complex scientific procedure involves assaying the metallic content of a coinage

Scientific American (February 1966), pp. 102–11.

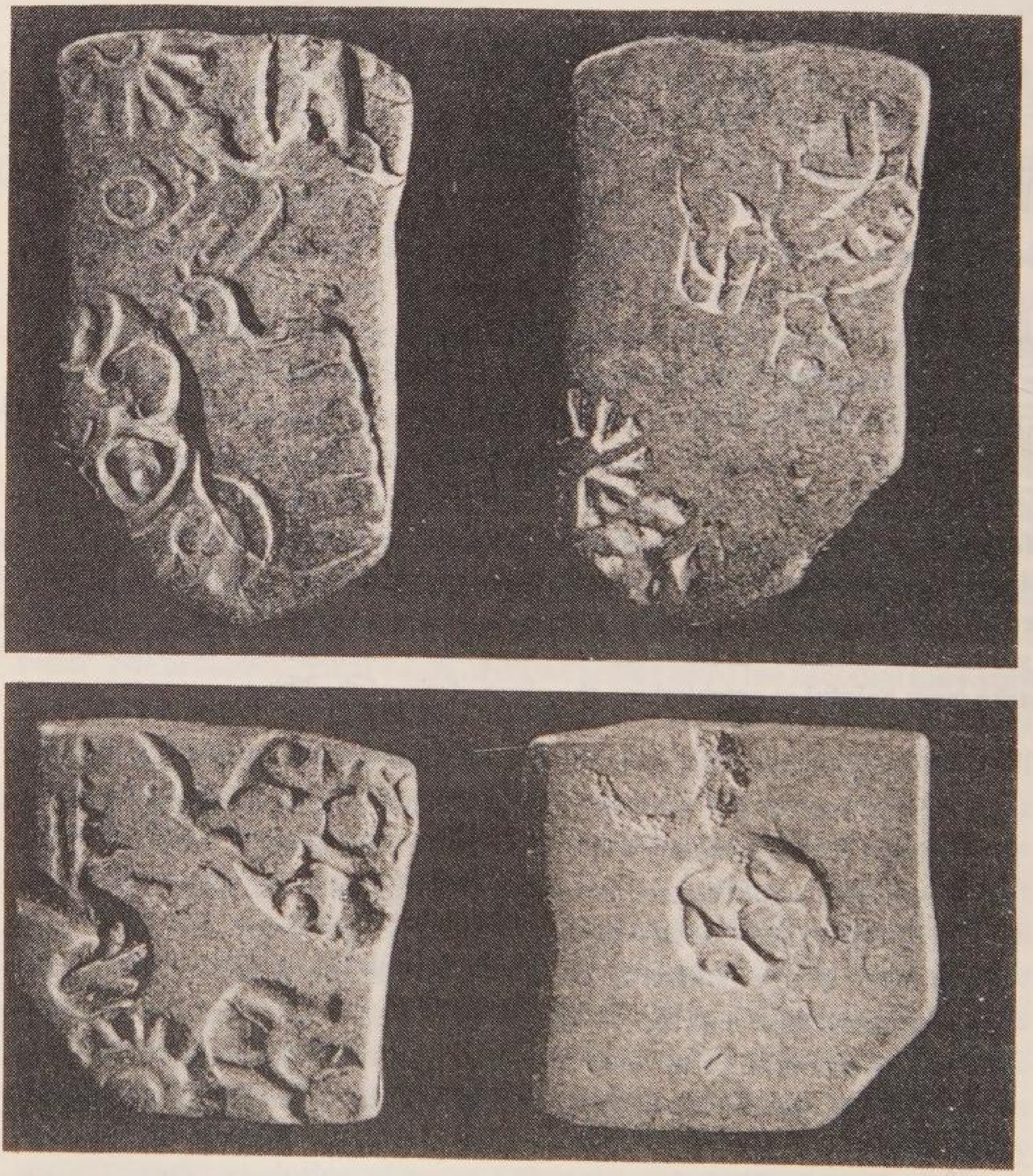


ve-Mark System was found on the obverse (heads) side of most coins in a hoard unearthed 1924 in the ruins of Taxila, an ancient Indian city. In each set of five marks the first four resented a king; the fifth, an issuing authority such as a crown prince. Often the fifth mark one set became the fourth in another, indicating that a son had succeeded his father as ruler. e marks were helpful in establishing the chronology of the coins.

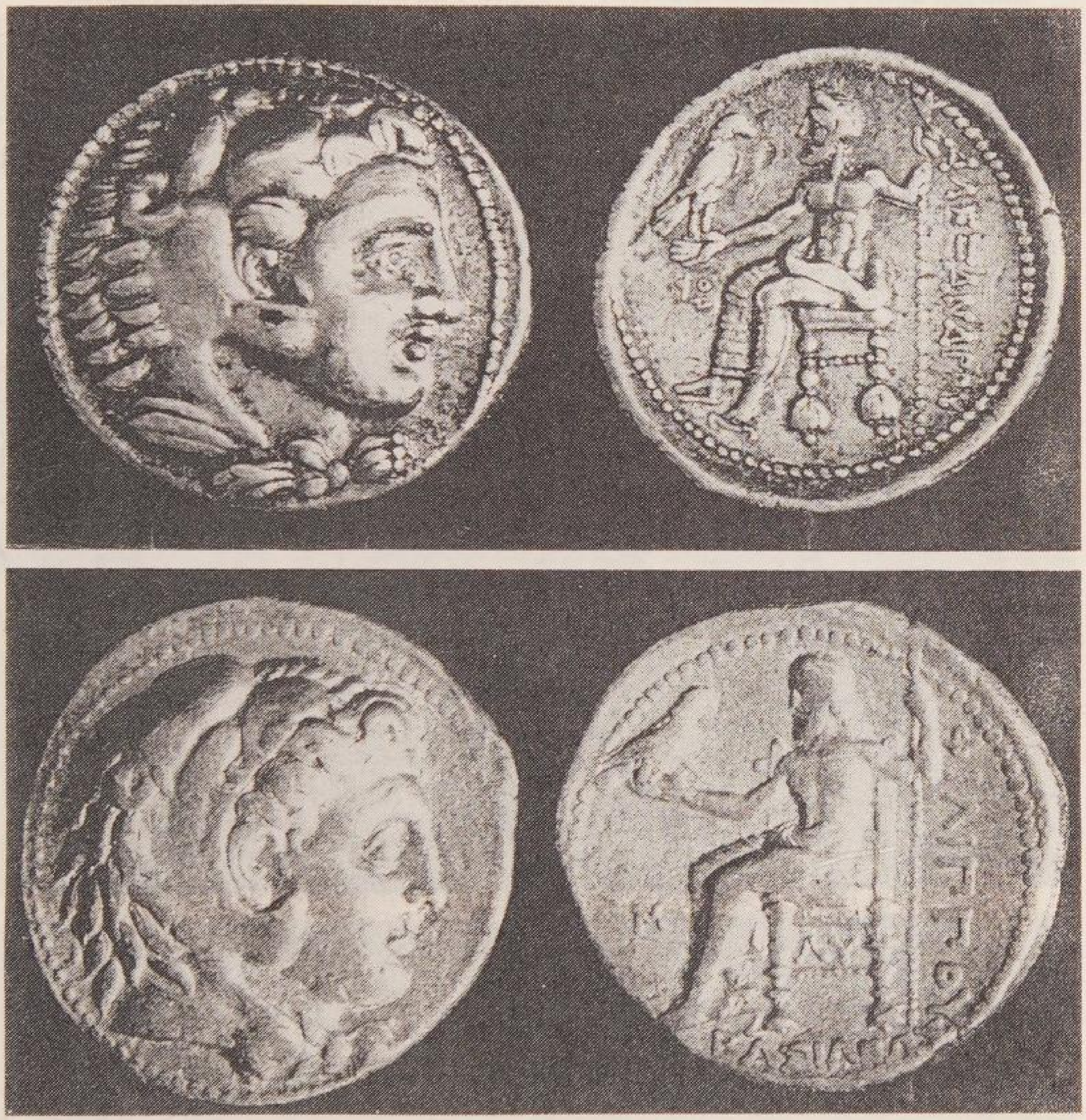
over a long period of time in order to obtain information about the economic history of the society. Such an investigation reveals that the French sou, which is today a synonym of worthlessness, began its career as the solidus, a gold coin of the emperor Constantine the Great [*see illustration*]. This coin's steady degeneration through 16 centuries is a considerable tale in itself. Similar work shows that the gentle art of inflation was practised just as ably in antiquity. Plutarch says, and archaeology confirms, that Solon the Wise reduced those Athenian debts that he did not cancel altogether by making them payable in drachmas debased by 27 per cent.

The mathematical approach I have in mind goes beyond the scientific procedures I have described so far. The basic theory that makes such an approach possible was developed only a generation ago. This theory, known as 'the homogeneous random process', applies to numerous different types of natural phenomena that are under the influence of many factors of a random nature, for example the diffusion of molecules of one substance through the molecules of another substance, the unceasing zigzag movement (called Brownian motion) of small particles suspended in a fluid, and even the behaviour of a stock exchange.

As applied to numismatics, the theory embraces several factors relating to the weight of coins. In antiquity it was easier to control the weight of coins than the alloy. The reason was that, given a good pair of balances,



Punch-Marked Coins of ancient India, similar to those found in the Taxila hoard, are depicted. On the obverse side (*left*) some features of the five-mark system shown in the illustration on the opposite page are visible. The reverse side (*right*) of such coins was either blank or carried a different system of individualistic punch marks. These coins and those in subsequent photographs are in the collection of the American Numismatic Society. In all the photographs the obverse side is at left and the reverse side is at right.



Dating of Hoard at Taxila was made possible by the presence of coins such as these. At top is a coin of Alexander the Great, who invaded India in 327 BC. At bottom is a coin of his successor Philip Arrhidaeus, in whose brief reign few coins were issued.

anyone could weigh the coin quickly and accurately, whereas an assay of the metallic content of the coin called for an expert. Hence the weight of a society's coinage tended to remain fixed even when the coinage was systematically debased in metallic content.

Yet no matter how carefully coins are struck in one minting, by the same craftsmen using the same technique, there is an unavoidable variation in their weight. This variation is restricted somewhat by the traditional practice of melting down the coins that fail to come within a certain margin above or below the 'true' weight. The amount of tolerance allowed has been termed 'the legal remedy'. In India before World War II, for instance, the legal remedy was 1/200 of the weight for the standard coin: the rupee of silver alloyed with 1/12 copper and weighing 180 grains. The differences in weight of carefully minted coins can be determined only with very delicate balances.

When a coin is put into general use, it loses a tiny amount of weight whenever it is involved in a transaction. Mechanical abrasion removes

REPUBLIQUE FRANCAISE
1871
LIBERTE * EGALITE * FRATERNITE
1
CENTIME
A

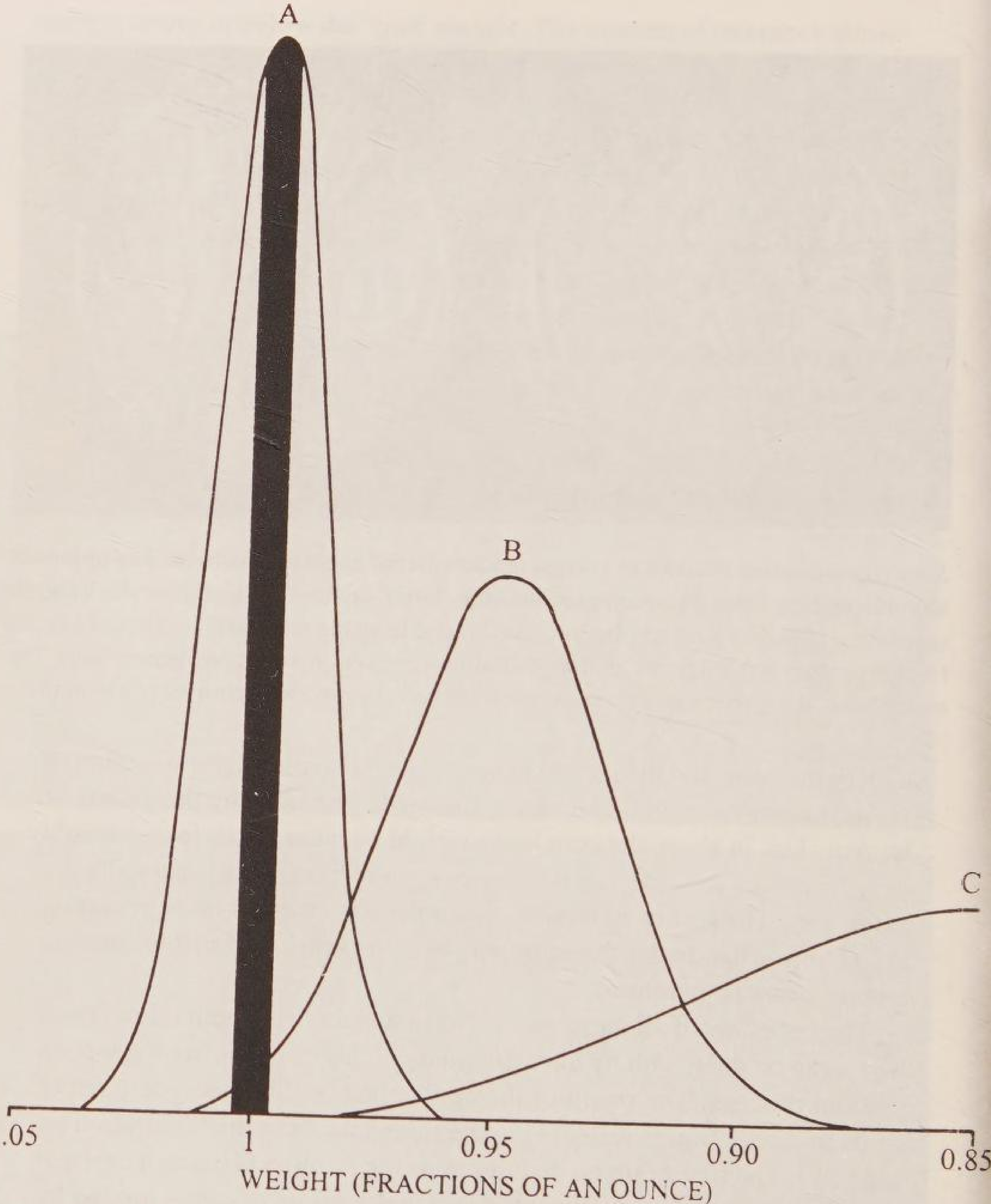
Debasement of Coinage is typified by the gradual transformation of the solidus (*top*), a gold coin of the emperor Constantine the Great, to the French sou (*bottom*). At one time 'sou' referred to the five-centime piece; it now means any coin of little value.

Slow Accumulation of coins in a hoard renders inapplicable the mathematical approach to numismatics. Such an accumulation is the 'Peter's pence' collection at the Vatican, consisting of Anglo-Saxon coins such as this one from the reign of King Offa of Mercia (eighth century AD). Pilgrims' donations built the collection over many generations. The mathematical approach needs coins that have had comparable histories of circulation.

a bit of the coin, and the metal is also subjected to the chemical action of various common agents, including the acids produced by the glands of human skin. In short, the coin loses weight by wear. Such losses would vary from coin to coin even if every coin were handled in practically the same way. The fact is, of course, that not every coin put into circulation at one time is handled in the same way over the years, and so the variation among coins is increased.

The net effect of all these variations in weight, from both minting and wear, can be dealt with by the mathematical theory of the homogeneous random process. The result of the application of this theory to a set of coins in circulation is reflected in the three curves in the illustration on page 514. The first of them, denoted A, is the familiar Gaussian curve of normal distribution: it reflects the fact that a group of coins minted by some uniform process has such a normal distribution of weights. The distribution is truncated because coins weighing more or less than the tolerated margin of error have been excluded by the application of the legal remedy, but in practice the resulting deviation from a normal distribution is negligible unless the minting has been singularly slipshod.

After the coins have been in circulation for a time, the curve of weight



Distribution Curves depict the history of circulation of a group of coins carefully minted and put into circulation at the same time. Curve *A* is high and narrow, indicating that most of the coins (a preponderance represented by the gray band) are close to the 'true', or mean, weight. After a period of circulation (*B*) wear has caused the mean weight to decrease and the variation in weight from coin to coin to increase, an increase shown by the flattering of the curve. Further circulation augments these effects (*C*): mean weight is lower and variation has increased so much that only half of the distribution is shown.

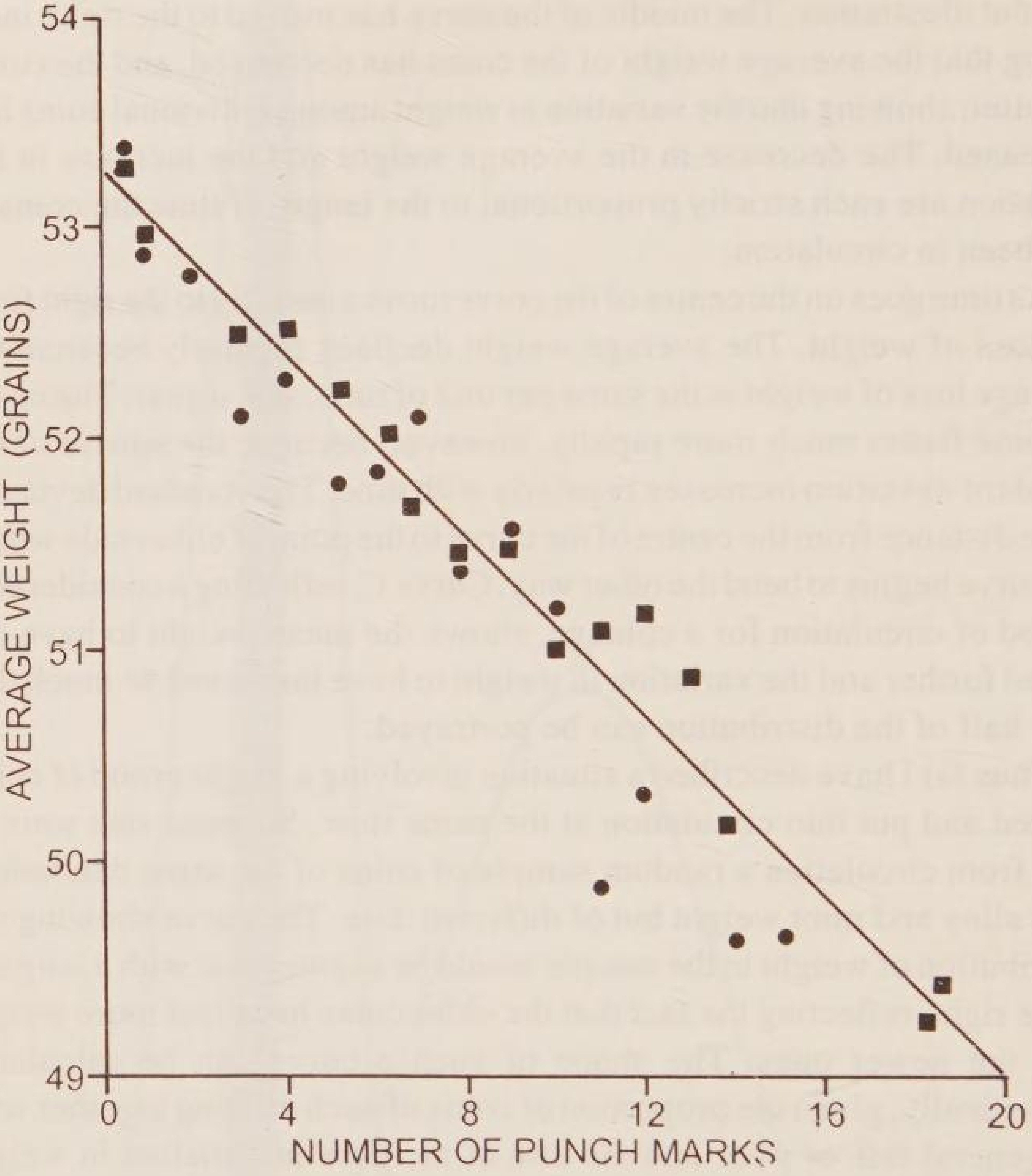
distribution is still normal but has changed shape, as is apparent in curve *B* in the illustration. The middle of the curve has moved to the right, indicating that the average weight of the coins has decreased, and the curve is flatter, showing that the variation in weight among individual coins has increased. The decrease in the average weight and the increase in the variation are each strictly proportional to the length of time the coinage has been in circulation.

As time goes on the centre of the curve moves steadily to the right from the loss of weight. The average weight declines regularly because the average loss of weight is the same per unit of time, say, a year. The curve become flatter much more rapidly, however, because the square of the standard deviation increases regularly with time. The standard deviation is the distance from the centre of the curve to the point of either side where the curve begins to bend the other way. Curve *C*, reflecting a considerable period of circulation for a coinage, shows the mean weight to have declined further and the variation in weight to have increased so much that only half of the distribution can be portrayed.

Thus far I have described a situation involving a single group of coins minted and put into circulation at the same time. Suppose one were to take from circulation a random sample of coins of the same denomination, alloy and mint weight but of different date. The curve showing the distribution of weight in the sample would be asymmetric with a long tail to the right, reflecting the fact that the older coins have lost more weight than the newer ones. The shape of such a curve can be calculated theoretically, given the proportion of coins of each minting together with the general rate of wear and the rate of increase in variation in weight among individual coins. These three constants cannot be predicted theoretically; they must be obtained by observation for each country and each denomination of coin.

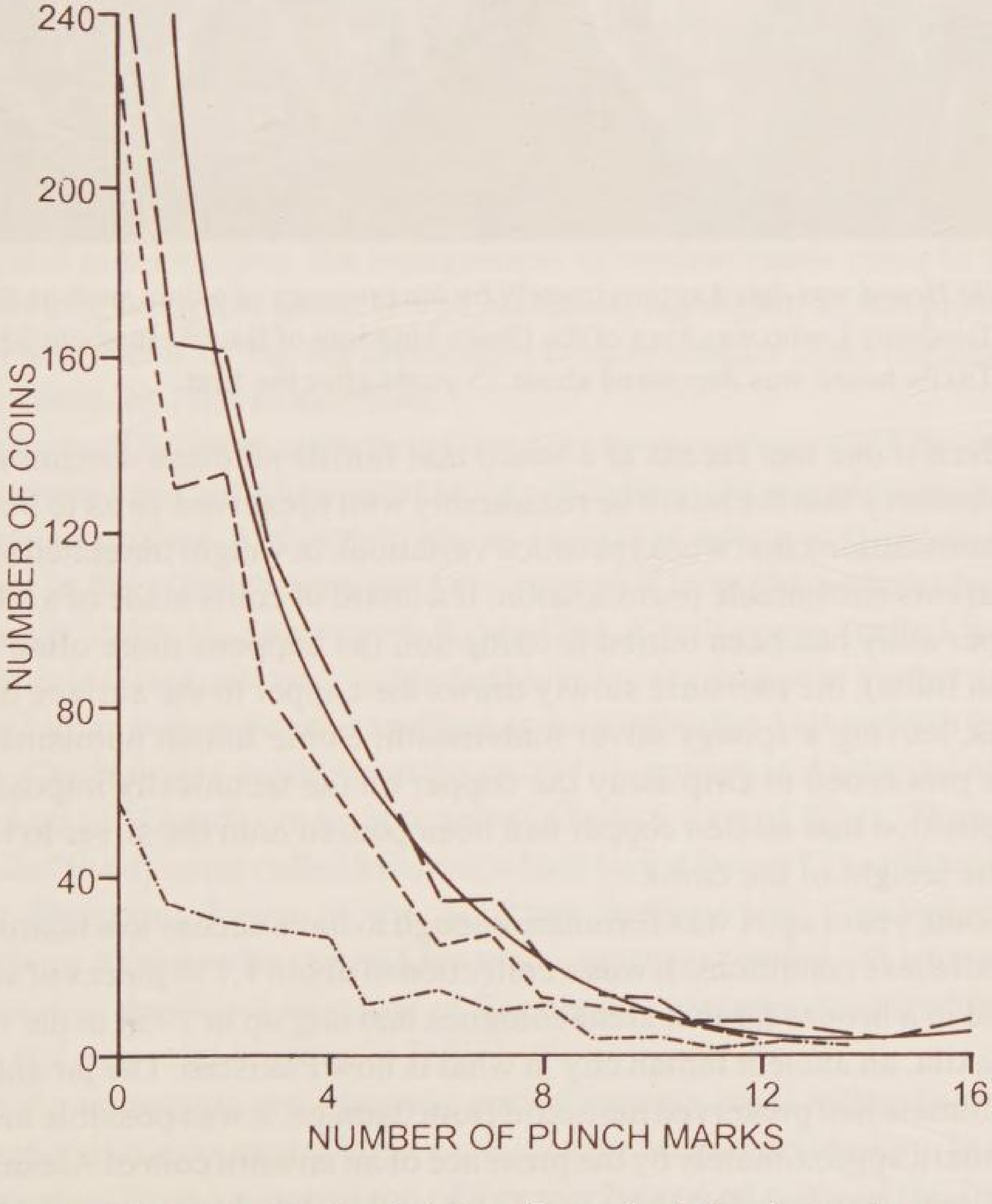
There is one more factor that must be considered; I have termed it 'absorption'. Coins of a group tend to disappear from circulation in a regular way that is proportional to the number circulating, provided that the rate of disappearance is not affected by some abnormal situation. The rate of absorption is represented by a statistical law—the same law that applies in the familiar geometric progression (2, 4, 8, 16 and so on). This is also the law of absorption for radiation, the simplest law of biological mortality, the law for the healing rate of wounds and the law of growth by compound interest.

Certain conditions have to be met if these mathematical principles are to be applied successfully. First, the coins must have been minted

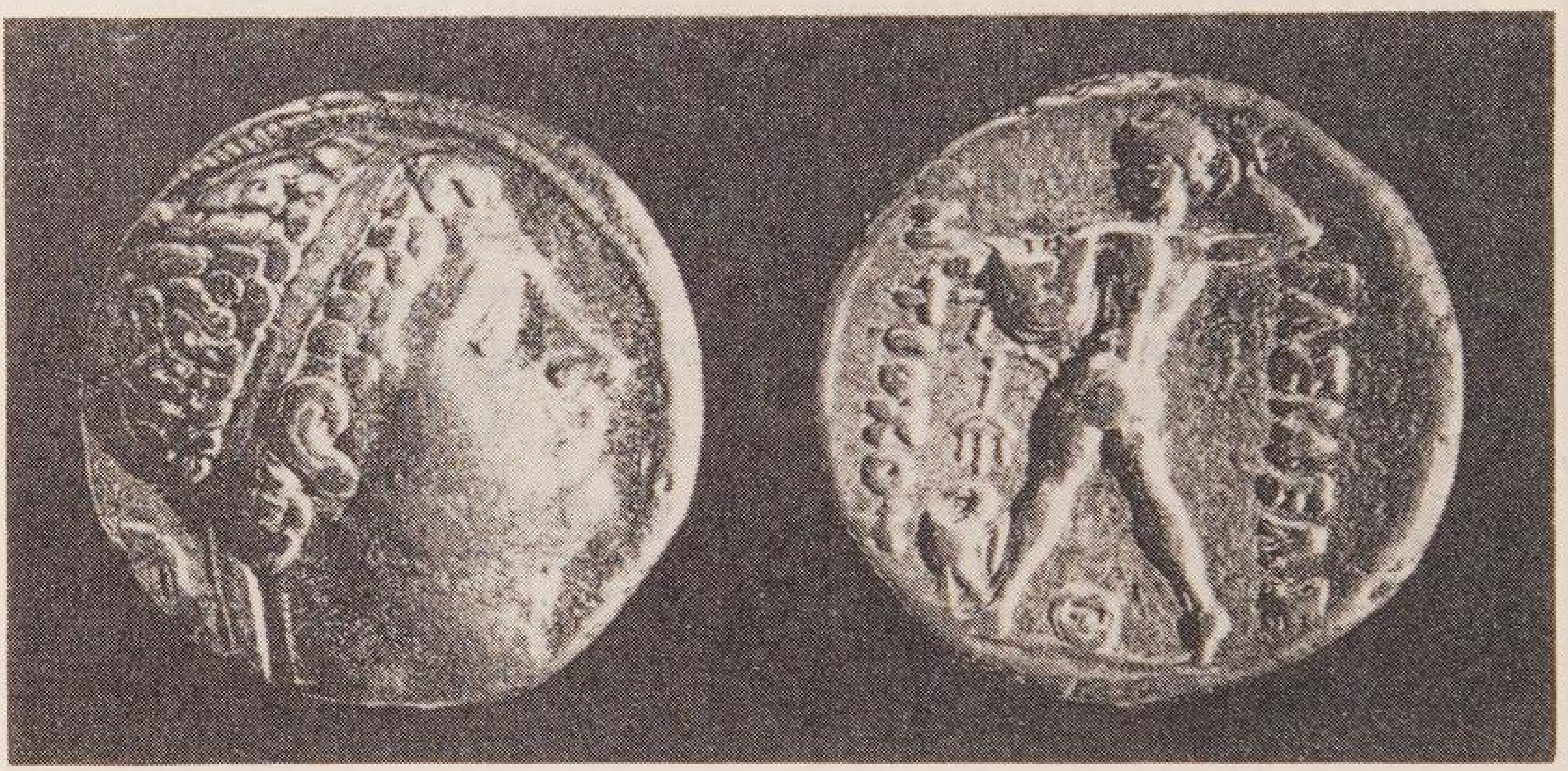


Age and Weight of coins in the Taxila hoard are closely correlated. The punch marks were put on the back of the coin periodically for checking purposes; hence the more punch marks, the longer the coin was in circulation. The average loss of weight of the coins, resulting from wear, is shown by the diagonal line. Square and round symbols represent square and round coins.

accurately enough to show only a slight initial variation in weight. If this is not done, as was often the case with ancient coins of the less valuable metals such as copper, pewter and billon (gold or silver heavily alloyed with a base metal), the effect of wear on the weight distribution is blurred. Second, the circulation of the coins must have been normal enough to have the proper effect. This condition usually excludes gold coins, which are often hoarded with a minimum of handling and are also likely to be clipped by owners seeking to amass a private store of gold. Finally, a sample to which the mathematical principles are to be applied must consist of a fairly large number of coins with comparable histories. Ideally they should be from a common hoard. In keeping with this condition it is useless to compare similar coins of widely divergent histories. For example, a coin of the Greek adventurer, Menander, who founded a kingdom in India about 125 BC, turned up in a bazaar at Poona in 1942 and was accepted as currency; its history was plainly different from that of Menander coins dug up by archaeologists in various parts of India or that of a specimen found in Wales.



Absorption of Coins, meaning their loss from circulation for various reasons, shows a close correlation with the number of punch marks found on the reverse side of the coins in the Taxila hoard. The theoretical curve of absorption is shown in colour; the broken curve closest to it represents all the punch-marked Taxila coins. Other curves represent square and round coins in the hoard.



Second Taxila Hoard was dated approximately by the presence of a coin such as this one from the reign of Diodotus I, who was king of the Greek kingdom of Bactria in about 250 BC. Hence the second Taxila hoard was deposited about 75 years after the first.

Even if one has access to a hoard that fulfills all these conditions, it is necessary that the hoard be reasonably well preserved so as to be free of encrustations that would produce variations in weight unrelated to the variations attributable to circulation. If a hoard of coins made of a silver-copper alloy has been buried in damp soil (as happens more often than not in India), the moisture slowly draws the copper to the surface of the coins, leaving a spongy silver underneath. Some Indian numismatists have proceeded to strip away the copper on the technically impossible supposition that molten copper had been poured onto the silver to bring up the weight of the coins.

Some years ago I was fortunate enough to have access to a hoard that met all these conditions. It was a collection of about 1,150 pieces of silver found in a bronze jar that archaeologists had dug up in 1924 in the ruins of Taxila, an ancient Indian city in what is now Pakistan. The jar and the dry climate had preserved the hoard from damage. It was possible to date the hoard approximately by the presence of an unworn coin of Alexander the Great, who invaded India in 327 BC, and to date it more precisely by a mint-condition coin of the emperor who briefly succeeded Alexander—his half brother Philip Arrhidaeus. The condition of the coin, taken together with the facts that Arrhidaeus issued few coins and that Taxila was far from his actual domain, justifies the assumption that the coin found its way into the jar soon after issue. The hoard can thus be dated close to 317 BC, when Arrhidaeus was imprisoned and assassinated. There was nothing in the archaeological context to indicate that the hoard had been deposited slowly over a long period of years, as is the case with religious deposits such as the 'Peter's pence' collection at the Vatican, consisting of donations left annually by generations of Anglo-Saxon pilgrims. Therefore it seemed reasonable to assume that the Taxila coins had had a comparable history of circulation and that this history had come to an end at about the time Alexander's local successor Seleukos Nikator lost Taxila to an invading army from the east.

Beyond this the coins at first yielded little information. Most of them had on their obverse (heads) side five punch marks with much in common from coin to coin. The reverse (tails) side in many instances had an entirely different system of much smaller punch marks. Nothing else was readily evident. The hoard therefore presented a difficult problem of classical numismatics: the arrangement of unidentifiable coins in their proper chronological order. It was in addressing myself to this problem that I began to work out the application to numismatics of the mathematical principles I have described.

By way of background to the story of my investigation, it will be useful to describe briefly the historical setting of India in the period to which the hoard is ascribed. Alexander, whose army was reluctant to follow him farther in his effort to conquer Asia, retreated from India soon after invading it. After his departure a Hindu king, Candragupta (called Sandrocottus in Greek records), extended his rule over the entire northern part of the Indian subcontinent, expelling or destroying the Alexandrian garrisons. Candragupta established the seat of his empire at the capital of the kingdom of Magadha in what is now the Indian state of Bihar. Thus was founded the dynasty called Maurya, which lasted from 312 to 178 BC. The most illustrious figure of the Mauryan dynasty was Candragupta's grandson Aśoka, who reigned for many years, expanded the empire as far west as the Greek kingdom of Bactria and by supporting Buddhism gave it a powerful impetus in India.

In the immediate pre-Mauryan period the only royal authority strong enough to issue coins on a large scale was the Magadha kingdom. In fact, it is evident from a comparison of the punch-marked coins of the Taxila hoard that they are of the type found in profusion in Magadha and wherever Magadhan influence penetrated. The system of five marks on the obverse side of the Taxila coins is the same as that of the Magadhan royal coinage [*see illustration*]. The first four marks represent a king; the fifth, an issuing authority such as a crown prince or provincial governor. Often the fifth mark in one series becomes the fourth in another, indicating that a son had succeeded his father.

These marks made it possible to group the coins. Then the average weight of each group gave its relative chronological order. It might also be thought that the marks would make it possible to set each marking system opposite the name of a king and thereby solve the whole problem of chronology. The difficulty here lies with the limitations of Indian historical records. There are no known or decipherable royal inscriptions before Aśoka. The records of the Jains, the Buddhists and the Brahmans often call the same kings by different names. In any case the names of kings usually appear in such records almost incidentally, as part of the inflated, semimystical story of some religious figure such as the Buddha. There is no mathematical theory for this kind of history.

Considerably more useful were the punch marks on the reverse side of many coins. These marks, unlike those on the obverse side, bore little resemblance to one another. They showed all the individuality of the ticket punches used by conductors on American railroads. A group of coins with identical obverse markings might include some specimens with blank reverse sides and some with from one to more than 20 of the tiny reverse marks. (When the number rose above 20, the marks were difficult to count.)

If one ignores the obverse side and merely groups the coins according to the number of makrs on the reverse, a striking fact emerges: the larger the number of marks, the lower the average weight of the coins [*see illustration*]. In other words, the reverse marks supplement the loss of weight as a sign of age. Evidently the reverse marks were correlated in some systematic way with the circulation of the coins.

These marks indicate a system of regular checking of the coinage, probably by traders' guilds. The traders were simultaneously financiers, bankers and dealers in precious metals; they would have had good reason to assure themselves that a given coin continued to adhere to a standard of weight. Presumably the checking was done at more or less regular intervals, apparently about every 12 years, indicating that the practice began about 500 BC.

Both the obverse and the reverse marks were valuable as corroborative evidence when I undertook to check the weight, variation and absorption rates of the Taxila coins. Interestingly enough, about 95 per cent of the coins fell in the range of some very accurately cut stone weight found in the excavations of two cities much more ancient than Taxila; the cities of Mohenjo-Daro and Harappa in the valley of the Indus River. This great civilization, comparable to that of Sumer and probably contemporaneous with it, had vanished without apparent trace until it was revealed by digging in 1925. Yet in spite of the complete silence of all Indian tradition on the existence of the earlier civilization the weight standard of the Indus valley survived unchanged into Mauryan times.

The weight curve of the Taxila hoard has the expected distribution with a tail to the right. Moreover, the number of coins compared with the number of reverse marks follows closely the theoretical 'absorption' curve [*see illustration*]. About 70 per cent of the coins survived after each checking period, however long that period was. These observations suggest two things about the economy of Taxila: (1) it was stable for more than 200 years, as indicated by the regularity of circulation reflected in the curves of weight loss and absorption of the coinage, and (2) the balance of trade ran in favour of Taxila, as indicated by the presence of Magadhan coins in the community—coins that could only have come in payment for goods originating in or shipped through Taxila.

The same Taxila mound in which the hoard I have described was found yielded another hoard that was deposited at a higher level and hence was associated with a later time. The coins looked cruder. The system of observe marks remained but the reverse marks had disappeared. Although these coins were almost in mint condition, the variation in weight was decidedly larger than that in the blank-reverse (and therefore little-used) coins of the earlier hoard. In addition, the alloy was notably debased.

This second hoard was dated to about 250 BC by a coin of the Greek king Diodotus I, king of Bactria. Thus the punch-marked coins of the hoard were contemporaneous with Aśoka. Although his coins had never been identified until these new methods pinned them down, it was known that his empire was prosperous and spread over the whole of modern India and Pakistan and most of what is now Afghanistan. The architecture and sculpture of the age were outstanding. Why, then, should the coinage be crude? Was there perhaps some mistake in my theoretical approach?

I was able to answer these questions by considering Indian currency that was in circulation in 1940 and 1941. At that time the rupee was still silver, but its copper content had been raised from a twelfth to a half. Moreover, the legal remedy had been abandoned. Although the same mints and machines had fabricated both pre-war and wartime coins, I was able to pick out new rupees in 1941 that were above the standard weight by more than twice the old tolerance limit. Obviously Aśoka's empire had been short of currency for everyday use, as the government of India was during World War II. Silver currency in both periods was progressively debased, although the ancients—unlike the wartime regime of India—never resorted to tokens and had no paper currency.

Having developed my idea of applying mathematical theory to the study of coins, I tested it with coins that were circulating in India in 1940 and 1941. Much of this work was drudgery; it took me about three minutes to weigh each of some 7,000 coins on a slow analytical balance. The tedium was somewhat relieved by the fieldwork involved in obtaining a representative sample of coins from active circulation. Except in three readily explainable cases, the weighings produced curves that closely fit the theoretical curves.

The first exception had to do with gold sovereigns. They had not been legal tender since 1931, although they did change hands occasionally between hoarders. Even so the fit would have been good had it not been for the two oldest pieces, which had been used only for worship by the family that lent them for weighing. Placed in front of the family's image of Lakshmi, the goddess of wealth, the two sovereigns had remained untouched for two generations.

Another exception was the humble copper pie, which was then worth 1/192 rupee and could be found only in a few places such as Benares, where pilgrims distributed them as 'charity' to beggars in order to gain merit at the lowest possible cost. The friend who had supplied me with 1,000 pie coins did not have the patience to take them all from the marketplace; he supplemented those that had been in regular circulation with a large number from a bank vault, where they had lain unused for years.

Third, the anna pieces were of soft metal and in common use. Hence they wore more rapidly than any other Indian currency. Wear made it impossible to read the dates on some of the annas, and these pieces had to be removed from the sample. They were the most worn and therefore the oldest coins; they were also the lightest, and their removal from the sample raised the average weight of the rest of the sample.

The mathematical approach to numismatics has applications beyond archaeology. In this age of vending machines, pay telephones, turnstiles, etc., the rate of wear of metal currency could readily be determined by weighing samples, preferably on a much larger scale than my own modest efforts. Given the rates at which weight decreased and variation increased, and the weight limit below which a coin would be regarded as useless, the rate of replacement for every denomination could be calculated and the necessary replacement coins minted on a systematic schedule. Allowance would have to be made for changes in demand, such as those resulting from new consumer products and from population

Coin of Menander, a Greek who founded a kingdom in India around 125 BC, is shown. A similar coin turned up in the marketplace at Poona in 1942 and was accepted as currency. Such a coin could not be used in a mathematical approach to numismatics because it would have a history of circulation widely divergent from that of other coins of similar origin.

growth, and for loss of coins.

A second application would be to keep track of the number of coins in active circulation. This can be tested by the same procedure used to estimate the fish population of a lake. The fish are caught in a net, tagged and thrown back. The number of recaptures is plotted against the total catch; a simple formula then allows a calculation of the population. This number, of course, represents not all the fish but all the fish that are susceptible to the particular methods of capture.

The 'netting' of coins could be done by sampling post offices, banks, vending machines and stores on a certain day throughout the country. Tagging might be done by making the coins harmlessly radioactive. Then the recapture could be detected by a Geiger counter. A similar procedure would make it possible to estimate the amount of paper currency in active circulation. The tagging could be done through the serial number, which a computer would read by electronic methods. The same computer would be programmed to provide an estimate of the total currency in circulation. By these methods a scientifically minded treasury could decide on the basis of wear and loss whether it was better to issue coins or paper for any given denomination.

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'Indo-Aryan' Nose Index*

Hindus, the dominant majority in the population of India, are divided into endogamous groups called castes. The dispute on the origin of these groups is tackled below on the basis of the most widely known anthropometric data. These data are still insufficient for deciding whether the anthropometric differences among castes is a consequence of origin from different races or they arose as a result of slow modifications under the influence of selection, kind of occupations and conditions of life. However, such a view may all the same be accorded some preference in line with the historical evidences. The point about what is included in the concept of 'race' over and above an assemblage of stable genotypes is not here touched upon.

1. *Principal Viewpoints*

H.H. Risley[1] (following Topinard) tries in the work cited often below to infer the racial origin of caste from results of anthropometric studies. He writes: '. . . in Eastern India . . . a man's social status varies in inverse ratio to the width of his nose . . . within a certain range of nasal proportions, these subdivisions are based almost exclusively on the totem. Along with a somewhat finer form of nose, groups called after villages and larger territorial areas, or bearing the name of certain tribal or communal officials, begin to appear, and above these again we reach the eponymous saints and heroes, who in India, as in Greece and Rome, are associated with a certain stage of Aryan progress'.[2]

If this quite confused statement of Risley carries some sense, that can be understood in the light of other remarks made by him in the same work,

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*Translated from the Russian article, 'Indo-Ariiskii Nosovoi Ukazatel', *Sovetskaya Etnografia*, no. I (1958), pp. 39–57. The translation is by Dr S.K. Chandra who has also prepared the Appendix: 'Explanation of some biometric terms and symbols used'.

then it can only be that among the three principal social strata there exists a sharp genotypic difference, the more so as he considers even 'musalmans' as one of the castes. According to him, the higher castes are Aryans, more numerous intermediate ranks of the populations are presumably of a mixed origin and the lower groups consist of aboriginal tribes as well as the lower castes of clearly a recent tribal past. These views got some support in a most recent work, data in which do not intrinsically warrant any far-reaching judgement on the Aryan intrusion or amalgamation with other races. Mahalanobis, Majumdar and Rao[3] on the basis of a series of cranial and physical attributes concluded by using a generalised index of distance between D^2 groups that there exist in Uttar Pradesh three perfectly delineated groups: one consists of the higher castes, a second of artisans and a third of individual tribes. These groups may be taken as corresponding to the three ranks of Risley in Bengal, though such an accordance in not confirmed in details.

On the other hand Nesfield, a loyal follower of Auguste Comte, declared[4] directly in his treatise on castes and tribes of Uttar Pradesh that those tribes were the last remnants and the only surviving representatives of the indigenous aborigines of India, who were once the sole inhabitants of the Indian continent and from the mass of whom over the slow turn of centuries formed the entire system of castes from scavengers to priests.

The whole treatise of Nesfield on the castes and tribes of Uttar Pradesh intends to show that the lower a caste on the social scale, the closer it is to the tribe. By itself it neither confirms nor refutes the assertion by Risley on the relative width of the nose. But Nesfield clearly considers as insignificant any variation in the form of the nose.

Views closer to Risley than to Nesfield are held by some linguists and historians,[5] who noted that the main linguistic subdivisions are Aryans, Dravidians and tribal (as for example, Munda) ones, usually called Austric. One of the many theories attempting to explain this visualises that the original population belonged to the Austric linguistic family, but was pushed from the fertile plains to the hills (where they live even today) first by the Dravidian and then by Aryan conquerors. The latter completed the process, but while doing so made the Dravidians subordinate in the north or pushed them out to the southern parts of the country.

Holders of this view do not go deep into anthropometry. They limit themselves to pointing out 'Austric' words even in highly Aryanised languages, note the influence of Brahui as a Dravidian island in the midst of the Aryan dialects of the Northwestern Frontier Province of present

Pakistan and affirm that even the most highly Sanskritized languages as Bengali and Marathi produce an impression of being Dravidian languages with an Aryan vocabulary.

2. *Possible Explanations*

It is, of course, desirable to know the laws of inheritance of features that allegedly have the property of fixing the genotypic differences among groups. On this point Indian sources do not contain any data even for individual families. In any case we are putting our stake on the nose index (as was already done earlier), a feature, rejected in other countries, but never discussed in regard to India, as it should have been. Any anthropometric feature, used for describing caste and 'race' should have some stability in time and space. As far as possible it should be independent of (not correlated to) the kind of occupations and the environment and so of such indices as the stature, noticeably changing from generation to generation together with an alteration of living conditions.

An apparent insufficiency of material does not permit us to resolve this issue. But the main question under consideration in this paper is restricted to Risley having any right on the basis of his data to assert that the castes originate from 'race' as well as the acceptability of the position of Nesfield as an alternative or whether it is better to develop some third opinion. The point is: is it impossible to explain the group variations by the formation of endogamous groups and their progenies over centuries? As in most cases the groups have a local character and upholding any such hypothesis would have put an end to the Aryan hypothesis of their having a racial origin.

Exceptions are Waddars, a caste of professional earth-diggers and stonecutters, that wandered throughout India over the centuries but retained some traits of south Orissa and north Telugu dialects. So also are Lamanis and Banjaras, the nomadic castes in scattered groups, the past unity of whom has to be recognised. Analysis of their anthropometric features, compared with those of the host population, may in each individual case furnish interesting insights. But data for such comparisons have not been collected. Moreover, the low economic level of development of these castes makes admixture certain as in the case of gypsies in Europe, though it is conceded linguistically that the gypsies are Indian in origin. This is thus the best known objection to the hypothesis implied by some linguists and by Risley.

Data of Boas[6] on the second generation of European immigrants in U.S.A. show that even the cephalic indices are subject to quick variations under the influence of environment. Both men and women workers in India carry heavy load on their heads since childhood and this cannot but be reflected on the cranial form, and some of the acquired characters may be transmitted by heredity, as well as formed by the pressure of a 'facet'[7] on the tibia bones of Indian (at least Punjabi) and Australian embryos. It is presumed that the thickness of the skull depends at least partly on an exposure of the uncovered head to a bright sun. This is the logic behind a head dress, which is worn by few members of the lower castes and hardly by the tribals. In addition, the custom of tonsuring male children is here widely prevalent. It is not certain how these changes in cranial form and thickness are related to the nose index. In absence of a high correlation such presumptions are not convincing enough. But we will advance arguments on the basis of which it may be taken that a highly significant (or statistically reliable) correlation exists between body dimensions.

Finally, the data based on a selective study of less than two thousand individuals out of a total population of about 150 millions in Uttar Pradesh, Bihar and Bengal are still quite inadequate for such a crucial conclusion as to the people having an Aryan origin or not. Moreover, it should be borne in mind that three millennia separating the latest possible major Aryan invasion from the period when measurements are carried out, were full of attacks, wars, famines, new migrations and general changes constantly occurring in North India.

One way to solve this problem could have been the study of archaeological materials, as it is presumed that Aryan graves have been identified and dated as early as the Indus Valley[8] culture (about the middle of the second millennium BP). But the nose index cannot be measured on skulls found in graves. Besides, expert anthropologists follow Hrdlicka[9] in holding that the body length as well as the cranial indices are useless for establishing "marks of a race, when a race is considered as an assemblage of genotypes".

A serious accusation may be levelled against all available measurements on biased (not random) sampling, as confirmed in the next section. Risley omits from the composition of the higher castes all individuals, who, he thinks, recall members of lower castes in facial traits or skin colour and from the lower castes those, who, in his opinion, remind of some representatives of the higher classes. The same procedure was adopted by Annandale selecting from 300 Anglo-Indians (Europeans) 200 men corresponding to his notion of the external appearance of an Anglo-Indian. Later, Mahalanobis found that they resemble 'Bengal Brahmins'.

By using his own index Mahalanobis[10] in fact established that the differences of these groups from the Bengal Brahmins coincide with their social distances. But he did not consider the inter-connection between the social and the economic indices including differences in nutrition, habits and work conditions such as the exposure to the sun, carrying heavy loads on head and more rampant diseases induced by poverty. In fact, Mahalanobis assumed without an iota of any further study that the similarity among castes is explained exclusively by amalgamation (hybridization) of various types. This is evidently reflected in both his premises and his conclusions.

Chakladar,[11] pointing out the deficiency in methods adopted by previous workers, selected 100 Rāḍhī Brahmins himself for the measurements. But it is quite obvious that these Brahmins in no way serve as a random sample of all Bengal Brahmins. For example, Chanda[12] reports that at least four groups of Brahmins in Bengal claim an alien ancestry. Such traditions were current even in the twelfth century. But it is difficult to ascertain their historicity in the present form. It is known from other sources that usually Brahmins were immigrants to less developed areas and even an indigenous priesthood often found it expedient to assert its alien origin.

In any case, the last great Hindu rulers of Bengal (Sen dynasty) actually came from Karnataka in the south and asserted that they belong to the Brahma-Kshatriya[13] caste, which made them simultaneously Brahmins and Kshatriyas. In the next section we would show that even the most intermixed (on theoretical grounds as well as held by tradition) caste groups reveal clear local differences, that remained unnoticed even by researchers. The only correct approach to Indian anthropometry lies in a consideration of local characteristics, economic position and work habit (on par with caste membership) as factors, permitting us to find distinctions among the groups, before forming any conclusion whatsoever in regard to the race origin.

3. *Material*

Measurements by Risley and his computations of the nose index do not always tally. But the errors, where detected, can be easily corrected. Corrections and all computations in this section were done by S. Raghavachari and U.V. Ramamohan Rao, who are not responsible, however, for the conclusions. But the initiative shown by them in studying the possibilities offered by this material goes beyond mere computations.

As the numbers of groups cited by Risley are not identical, we take six castes that may be relegated to three economic categories (groups). In each of them there are two castes: Brahmins and Kāyasthas belong to higher castes, not engaged in physical labour; Kaibartas and Pods (though clearly tribal in ancestry) are peasants, artisans, fishermen, etc.; Māls and Māl-Pahārias were even in 1891 tribal groups, not regularly engaged in trade and agriculture.

The nose index (NI) has undoubtedly a non-normal distribution, though both the width and the height of nose, measured from the point D at the meeting point of the nasal partition with the skin of the upper lip, are distributed normally.

For this reason the logarithm of NI was tested. After ascertaining its normal distribution this feature was accepted for the workout. To avoid negative quantities a change of sign was resorted to. Calculations with non-logarithmized NI give almost the same results.

Dispersion analysis (explained in Appendix) (Table 1) shows that, firstly, the differences among castes both in body length (BL) and in nose index are quite significant; secondly, that the nose index has a negative correlation with the body length; finally, that the same correlation within a caste is insignificant. This is generally typical of a series of homozygotic populations, though it is not sufficient to prove homozygoty.

If further we distribute those very degrees of freedom (see Appendix) so that two come to the group differences and three, to caste differences within groups, we find that the noted deviation among castes is explained by the group difference (of economic categories) and that differences within groups are undoubtedly less with a significant correlation only among groups. Finally, the best linear discriminant index (see Appendix) remains the same if computed for castes or for groups, viz. $x = \log NI + 0.002 (BL)$. In our units of measurement the body length contributes more than the nose index. But quadratic deviations (SD) show that actually the differences among groups are established more with the aid of log NI than with the body length. The discriminant index places groups in order of social precedence, but in the group frame both the significance and the order of castes may be disputed. For example, Kāyasthas often occupy a higher rank in Uttar Pradesh with the exception of a few Brahmins, as do actually priests or landlords.

A paired study of castes in groups after group demonstrates very negligible variations within groups.

Next step should be a study of stability in time. Here a dissimilar size of the samples hinders any general study, but Table II contains data on four castes only from Uttar Pradesh alone. In each, 100 men of nearly the same age were measured in 1891 and 1941, and thus after an interval of exactly 50 years. Dispersion analysis shows that the difference between years is the most significant. But again differences among castes also have a high significance as well as the interaction of caste and study year. The discriminant index of castes now takes the form log (NI) + 0.001 (BL). But the caste order as per the index value is not the same in 1891 and in 1941. Brahmins occupied in 1891 the first place and Chhattri, the second. In 1941 they exchanged places. It is interesting that the nose index evidently decreased between 1891 and 1941 for all the four castes, while the body length diminished only for three—Brahmins, Chhattris and Chāmārs (very much for the last two). The change in the nose index may be ignored, as this is explained by a difference in measurement procedures. But one cannot ignore the body length too.

What deserves a greater attention is the circumstance that the correlation between the body length and the nose index changes sign on taking into account the interaction of year and caste, though it became statistically not significant. Again, the Doms are placed above Chāmārs (leather workers) by the discriminant index, while their social status, as far as known to me, was never considered higher than that of the Chāmārs. In any case, Doms are tribal castes and according to Risley should occupy a lower rank on the social scale, while theoretically Brahmins should be in the first place.

The third step consists in studying local differences. This is shown in Table III. In it three castes, Brahmins, Kāyasthas and Kaibartas are compared on average values of the features in Bengal and Uttar Pradesh for 1891. Here again, while taking into account the interaction of caste and province, the sign of correlation between the features changes. The value of the discriminant index as before depends more on the body length. Arrangement of castes on this index in both the provinces accords with the accepted order of precedence. But log NI differs much in different provinces as well as in different castes, while the body length plays a role only in the distinction among castes.

In Table IVa we compare Kurmis (peasants) of Bihar, Chhotanagpur and Uttar Pradesh. Numbers of groups are: 71, 100 and 100. With such dissimilar sample size at times some results are arrived at, as would have been impossible with other samples from the same set of data (negative values of dispersion). Here we find a large significance of deviations both on the body length and on log NI among neighbouring provinces. Goālās in Bengal, Bihar and Uttar Pradesh (Table IVb) were herdsmen, engaged marginally in agriculture. They reveal very sharp differences in log NI, but not in the body length. It is possible that this again is a consequence of non-uniform sampling, though initially it was regarded that this caste also has a common ancestry and occupies the same rank.

Brahmins (Table IVc) from the same three provinces show clear differences in the nose index but a subnormal dispersion in stature.[14] There is no single pattern in the distribution of the anthropometric parameters.

These insights indicate that caste is not genetically homogeneous as per the features selected. In the last case, for example, we would have concluded (as per Risley) that the social position of Brahmins (on the basis of the nose index) improves eastward from Uttar Pradesh, which is sheer nonsense. If the increasing nose index is taken as an evidence of aboriginals, dissolving the main bulk of the incoming Aryans from the west, we are again placed in a most absurd situation, as the relative width of the nose in such a scenario should increase eastward, whereas it is continuously reduced.

Table V reports proportional data (by random sampling from unequal numbers of Risley) on the four castes of Uttar Pradesh and Bihar. The table exhibits most significant departures among provinces and among castes in regard to both the features, while in case of the interaction of the province and the caste the departure is significant only for the body length. Correlation between the body length and the nose index is positive for provinces but negative for castes. The caste orders as per the body length and as per the nose index do not coincide, while the discriminant index gives varied ranks for two neighbouring provinces, where language and social stratification were much the same over more than two millennia.

Table VI contains a dispersion analysis of three variables. If we compare combinations of nose height and width with the body length, we get the same results as in the case of comparing log NI with the body length. The regression of stature on the two nose measurements is so great that one should not be surprised that now in the discriminant index: $x =$ body length -73.3 (nose height) $+ 63.9$ (nose width) and thus the body length enters it with a relatively little weightage.

The difference between Rāḍhī Brahmins of Chakladar and Bengal Brahmins of Risley (as per Student t test) is highly significant ($t = 10.67$; d.f. $= 123$) on log NI, but the difference between them on the body length is quite negligible ($t = 0.39$). Data of B.S. Guha,[15] drawn in for comparison with the data of Risley on the four castes (Brahmins, Kāyasthas and

Pods of Bengal and Brahmins of Uttar Pradesh) differ in the nose index at 1 per cent level of significance.[16] The difference in the body length is observed at the same level of significance for the Bengal Brahmins and Kāyasthas, but not for the Bengal Pods or Uttar Pradesh Brahmins. Bengal Brahmins and Brahmins of Uttar Pradesh, studied by Guha, do not show on comparison with the respective figures of Chakladar and Majumdar any significant differences either in the nose index or in the body length.

Data of I. Karve for Madhyandina Brahmins of the Maratha country show[15] that there are local variations, quite unsuspected by the author. Almost each of her histograms, though normalized by a single curve, show a bimodality. As far as the nose index is concerned, Table VIIa shows that this evidently exceptional high-caste endogamous group is not geographically homogeneous. The significance of deviations, as can be gleaned from Table VIIb, is increased on arranging the nine centres, constituting the sphere of observation, into two groups: 'north' and 'south' (centres in geographical order: north—Amaravati, Nagpur, Jalgaon and Nasik; south—Aurangabad, Parbhani, Jalna, Poona and Barsi).

Table VIIIa shows that the north and the south differ also in blood groups A-B-AB-O at 2 per cent level of significance. Almost the same level of significance is observed in blood groups between Nagpur and other centres. The total number of cases subjected to observation is too meagre for extending this method to the entire 8 x 4 matrix (8, as Amaravati is deleted by the researcher). In fact, the gene frequency according to Karve p, q, r (computed with the aid of the Bernstein method, which is clearly insensitive) shows a quite regular lowering of r from north to south, except Barsi, where the frequency of r is high. On the basis of an improved method by Stevens calculations are done (Table VIIIb) for p, q, r in north and south. Geographic variations, real or due to a faulty sampling, passed unnoticed by the researcher herself, who seems to hold (without adducing comparative data or reference to any such) that these Brahmins are anthropometrically distinct from other groups of Brahmins in India.

4. *Historical Reflections*

As they were comprehensively considered in our other works[17] only a brief resumé is offered here. There are enough grounds to think that around 1500 B.C. Aryans invaded the territory of the urban Indus Valley culture. There are more certain evidences that Aryans and pre-Aryans amalgamated with each other, resulting in the formation of new tribal communities with an Aryan language and organization, but with an increasing role of pre-Aryan and non-Aryan customs, which cannot be explained otherwise. Indus Valley culture has clear traces of a strong class differentiation in its architectural monuments from large palatial buildings to simple barracks for slaves. Thus, already for this early period there are evidences of a heterogeneity of 'Aryans' progressing to the east.

At the time of this eastward progress, particularly in the period of Buddha for example, both Aryan and non-Aryan tribal elements were more and more drawn into a caste society. But even the highest and theoretically the most exclusive caste, that of the Brahmins, reveal from the earliest times traits of amalgamation, as evidenced by a great diversity of skin colour, eyes, facial traits as well as elements of culture, typical of Brahmins in certain areas and abjured as undignified for Brahmins at other places.[18] This is observed over the entire history of India. Kāyasthas, a professional caste with a heterogeneous ancestry as evidenced even in the copper plate inscriptions, contained at first elements of other castes (from Brahmins to Shudras) though the evidences adduced in the previous section shows that they have the same somatic homogeneity as any other caste. Kurmi or Kunabi (peasants or agricultural workers) is a very large professional caste, but the same name Kurmi in Chhotanagpur refers to an almost aboriginal group that claims a kinship with the Bihar caste and is possibly one of its branches reverting to the primordial state. Kaibartas in Bengal are the same as Kewats in Uttar Pradesh. The word 'Kaibarta' means 'fishermen' and was used as such in ancient sources. But some Kaibartas occupied a high priestly position among other tribes in Bengal and are ranked almost the same as most Brahmins or even higher.

It may be added that a high economic status allowed any family to break caste rules without being made outcastes for this. Again, the higher acumen in battles allowed men, quite dark and of low or doubtful ancestry, to ascend high on the social and caste ladder. Risley himself gives many such instances including tribal chiefs, isolated in the form of a special caste. Many examples may be cited from an earlier period. Greedy Brahmins found without difficulty if suitably rewarded, for any person an eponym among the 'Aryan' heroes. Moreover, there exists a quite expensive ritual of 'rebirth', that permits a change in the caste affinity, independent of the nose index.

It can be easily shown that a purity of blood does not mean much in the life of the tribes. Among the most prevalent tribal groups we find subgroups bearing the name of totems, that could not have originally belonged to the tribe, though now they are taken as exogamous clans.

Cases of accepting members of an alien tribe were not rare. For example, Garos widely practised accepting in their midst slaves, bought from outside.[19] This heterogeneity plus the Aryan intrusions from outside into a part of the country, already populated by a highly civilized people, repudiates the theory of Nesfield as much as the theory of Risley, if the relative number of various caste elements in the population remained unchanged.

The very last remark may militate against any assertion on the races in India, independent of changes in physical type, caused by living conditions, work habits and nutrition. Those holding that the Dravidians crowded out the aboriginals from the valleys to the hills and were themselves thrown out to the south by the warlike herdsmen Aryans do not take into account the value of the relative growth of population under different conditions of acquiring food.

Food-gatherers, as were most tribes in India till most recently, may survive only on condition that over one square mile of their territory there are not more than 2–3 persons (usually much less). This territory must be a hilly area, where stones that can serve as weapons are easily available and where hunting wild animals is feasible even during torrential rains of the monsoon. Thus, the average density of population is usually much less than what is presumed. Herdsmen need a cleared ground and may have a population, say, with a density nine times higher. But the fertile alluvium of the Ganges basin, with which this paper is concerned, were initially covered with a thick forest, that could not be cleared without metallic (iron) implements. They were essential also for humbling other tribes. The agricultural way of life, an inevitable consequence of having iron and the cattle, permitted attaining a density of population in many fertile tracts of the country more than 100 persons per square mile. Such density was unthinkable for a tribal or pastoral way of food harvesting even in a single district. It may be then asked: how did these agricultural settlements grow in India? Apparently the process was mainly accomplished by settling in villages, usually quite harmoniously. Some settlers from another district moved out on a search for the good earth, entered into agreement with local tribes, if there were any such, must have amalgamated with them to some degree and due to an improved nutrition among these settlers the population growth assumed a much quicker rate.

Village settlements, as can be seen from numerous land disputes, were often headed by Brahmins. And, a Brahmin (as high priest) was essential to enlist new tribes, associated peacefully as components of the new society on a caste basis. This explains the lordship of the Brahmins as well as the preservation of an infinite number of castes, bearing tribal appellations.

'Aryan' linguistic groups indicate very little movement on the part of the population over and above the march of a few immigrants carrying with them agricultural tools and some knowledge of the Aryan language. For Brahmins, Sanskrit was always one of the adopted languages.

It cannot be said that the immigrants dominated the tribes in number and their intrusion had any mass character. But the population, that lived by food-gathering and not food production, had a much slower growth rate, as can be seen even today. This means that between the initial inhabitants of the settlements there could develop local differences not of a racial nature and that various castes becoming parts of a developing society might acquire in subsequent stages marks of certain genetic differences, originating rather in successive endogamous family groups than in races. Amalgamation was easier in the beginning than later, when the settlements were converted into villages with an established class structure. But some amount of cross marriages as earlier did persist, often by way of a quite planned hypergamy. Then from the old groups evolved the new castes as a result of differences in locality, profession or economic status and each one of them later tried to become permanent.

By the way, this repudiates the theory of the linguists. One of the salient social heritages of men, namely language, is the most variable, the most easily acquireable and the fastest changing in character.

Language, that served as a means of communication between members of a sparse tribal community of gatherers mostly harvesting food with the help of stick-diggers or of hoe cultivation, cannot satisfy the demands of a much denser agricultural population based on the cattle and the plough with all attendant complexities of its technology and social organisation.

One of the explanations behind the existence of the two main linguistic groups in India lies in the fact that the 'Aryan' population developed from the immigrants, bringing in Aryan language along with the plough, while in the Dravidian territory the new technique and its language was developed considerably by the local inhabitants, who established communications with the external world. In both cases the class structure was the same. Many of the really lower castes clearly bear tribal names, while the heterogeneity of the Brahmins is hidden under a similarity of name, profession and class position in society.

It may be concluded from all this that even small differences between the settler groups, mixed in general, are conditioned by the environment (including living conditions as well) and that the racial origin of social groups of Aryan or aboriginal population is devoid of any sense.

NOTES

1. H.H. Risley, *The Tribes and Castes of Bengal: Anthropometric Data*, vols I and II. 'Ethnographic Glossary', vol. I, Calcutta, 1891.
2. Ibid, vol. I, p. xxxiv.
3. P.C. Mahalanobis, D.N. Majumdar and C.R. Rao,' Anthropometric Study of the United Provinces, 1941'. A statistical study, *Sankhya*, vol. 9, 1948–49, pp. 90–324.
4. John C. Nesfield, *Brief view of the caste system of the North-Western Provinces and Oudh, together with an examination of the names and figures shown in the Census report, 1882*, Allahabad, 1885.
5. P. Meile in the book *L'Inde Classique* [Ancient India] (publ. L. Renou, J. Filliozat etc, Paris, 1947–49) reviews this (see vol. 1, pp. 43–51). This author seems to be under the spell of what he calls an 'excellent mathematical approach', on what dwells the report of Guha (B.S. Guha, *Census of India*, vol. 1, pt. 3, 1931). On linguistics and race see J. Przyluski, Un ancien peuple du Punjab [An ancient people of Punjab], *Journal Asiatique*, 1926, no. 208, pp. 1–59. Sylvain Levi, Ibid, 1923, p. 13; L.de la Valleé Poussin, *L'Inde jusque vers 300 avant J.C. [India upto about 300 B.C.*], Paris, 1924 (upto p. 101 on Indo-Iranians and Indo-Europeans). An older view on ancient Indians is given in the first chapters of the book: A.B. Keith, *The Religion and Philosophy of the Veda and Upanishads*, Cambridge, Massachusetts, 1925. A review of Indus valley civilisation is given in a recent work: R.E.M. Wheeler, *The Indus Civilization*, Cambridge, 1953. A somewhat fantastic theory of a connection with the West is given in the work: B. Hrozny, *Ancient History of Western Asia, India and Crete* (Prague, 1951). This author reads Indus script in the same manner as the Hittite ones, and regards Hittites as the dominant people.
6. R.A. Fisher and H. Gray, 'Inheritance in Man: Boas's data studied by the analysis of variance', *Annales of Eugenics*, vol. 8, 1937–38, pp. 74–93. On allegedly biological foundations the authors express a doubt about the correctness of cephalic indices published by F. Boas. See F. Boas, *Changes in Bodily Form of Descendants of Immigrants*, New York, 1912. 'Materials for the study of inheritance in man', *Columbia University Contributions to Anthropology*, vol. 6, 1928. Morant and Samson in their work show considerable differences among Jews-emigrants from different parts of Europe, but both dispute the methodology and conclusions of Boas (see G.M. Morant and O. Samson, An examination of investigations by Dr Maurice Fishberg and Professor Franz Boas dealing with measurements of Jews in New York, *Biometrica*, vol. 28, 1936, pp. 1–31).

7. F. Wood Jones, *Habit and Heritage*, London, 1934, pp. 44–51, where the author dwells on books: Charles Havelock, 'Morfological peculiarities in the Punjabi and their bearing on the question of the transmission of acquired characters', (*Journ. Anat. and Phys.*, 1893, pp. 1–19, and 1894, pp. 271–81; see also W. Quarry Wood, The tibia of the Australian aborigine. *Journ. Anat.*, 1920, *54*, pp. 232–57. A review on this question is given in the paper of P.B. Medawar (*New Biology*, 1951, no. 11, pp. 10–26). The position of squat is quite different in men belonging to the higher castes: the man sits, pressing legs under himself (like tailors in old Europe). But studies on differences in corresponding surfaces of tibia and astragalus are unknown to us. Herodotus in the beginning of Book III of his 'History' reports that the skulls of Egyptians were much thicker than those of the Persians, as the latter (lying in the same battlefield by the Nile) could be split by throwing on it a small stone. He explains this by the fact that the Egyptians exposed their shaved heads under hot rays of the sun, while the Persians from childhood moved with covered heads. As far as known to me, such an effect of the sun on the human skull was neither confirmed nor rejected by recent works in the field of anthropometry. The possibility of inheritance of such phenomenon is also not known. To sample on the basis of skull thickness is not possible, as can be surely done on that of skin colour and nose measurements.
8. V. Gordon Childe was the first to advance the proposition that the cemetery H in Harappa is possibly Aryan (see V. Gordon Childe, *New Light on the Most Ancient East*, London, 1952, pp. 187–8). Unconvincing discussion, given in the book: S. Piggott, *Prehistoric India*, London, 1950, p. 231 See also *R.E.M. Wheeler*, op. cit.
9. See V. Gordon Childe, *Prehistoric Migration in Europe*, Oslo, 1951, pp. 1–2.
10. P.C. Mahalanobis, 'Analysis of Race-mixture in Bengal', *Journal and Proceedings of the Asiatic Society of Bengal* (New Ser.), vol. XXIII, 1927, pp. 301–33.
11. H.C. Chakladar, 'Problems of the Racial Composition of the Indian Peoples', *Proceedings of the 23 Indian Science Congress*, Indore, 1936, pp. 359–90.
12. R. Chanda, *The Indo-Aryan Races*, Rajshahi, 1916, pp. 162–201.
13. R.C. Majumdar, (ed.), *History of Bengal*, vol. 1, Dacca University, 1943, p. 565 (on castes and subcastes), 205–7, 241 (on Sen Kings).
14. This means that the variability among groups is below the intra-group variability *(Fv<O)*.
15. B.S. Guha, *Census of India*, vol. 1, pt. 3, 1931. Examples numbering about 50 do not give a quite adequate explanation of such hazy groups as 'Telugu Brahmins'. But on such foundation the author did not hesitate in offering a classification of the entire population of India.
16. This means that the probability of repetition of such a difference and larger on resampling is 0.01.
17. Iravati Karve, 'Anthropometric Investigations of the Madhyandina Brahmins of the Maratha country', *Bulletin of the Deccan College Research Institute*, vol. 3, no. 1, 1941.
18. D.D. Kosambi, 'Early Brahmins and Brahminism', *Journ. Bombay Branch of the Royal Asiatic Society*, vol. 23, 1947, pp. 39–46; 'The Origin of Brahmin Gotras',

the same journal, vol. 26, 1950, pp. 21–80; 'Ancient Kosala and Magadha', the same journal, vol. 27, 1951, pp. 180–231; 'Brahmin Clans', *Journ. of the American Oriental Society*, vol. 73, 1953, pp. 202–8.

19. Martin Montgomery, *Eastern India*, London 1838 (3 vols). This work used the notes of Francis Buchanan. In vol. 3, p. 692 the author reports that slaves constituted roughly two-third of the Garo population; 'any person, who chooses to live among them and follow their manners, may obtain the rights of a free man'.

I. Bengal (1891), 6 castes ($n = 100$ each)

Caste	Risley nose index	$x = -\log$ (NI)					y = body length in cm					Means		
		Mean	Dispersion σ^2	SD σ	Covariance	Mean	Dispersion	SD	Index	Group	x	y	Group Index
Kāyasths	0.707	0.152	0.0015	0.0387	0.0277	163.69	29.63	5.44	0.479	A	0.152	164.64	0.481
Brahmins	0.708	0.153	0.0017	0.0412	−0.0055	165.59	25.74	5.07	0.484				
Pods	0.764	0.118	0.0014	0.0374	0.0590	162.59	37.07	6.09	0.443	B	0.118	162.76	0.444
Kaibartas	0.766	0.117	0.0014	0.0374	0.0183	162.93	43.37	6.58	0.4428				
Māl-Pahariās	0.936	0.030	0.0014	0.0374	0.0176	159.22	29.28	5.41	0.348	C	0.027	158.50	0.344
Māls	0.947	0.024	0.0012	0.0347	−0.0156	157.78	20.84	4.56	0.341				

Ia. Dispersion analysis of 6 castes

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy	Correlation
Among castes	5	1.6741	0.3348	223.20***	81.72	4243.64	848.73	27.39***	0.9695***
Intra-caste	594	0.8676	0.0015		10.15	18408.33	30.99		0.0803
Total	599	2.5417			91.87	22651.97			

$x = -\log (\mathrm{NI}) + (0.002)$ body length

Ib. Analysis of deviation for three groups (as in Table I)

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy	Correlation
Among groups	2	1.6726	0.8363	557.53***	81.29	3953.70	1976.85	63.79***	0.9996***
Among castes in a group	3	0.0015	0.0005	$(3.00)^{-1}$	0.43	289.94	96.65	3.19	0.6454
Residual	594	0.8676	0.0015		10.15	18408.33	30.99		0.0802
Total	599	2.5417			91.87	22651.97			

$x = -\log(\text{NI}) + (0.002)$ body length

Ic. Bengal (1891) only Brahmins and Kāyasths

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy
Among castes	1	0.000013		$(123.08)^{-1}$	0.04	180.50		6.29*
Intra-caste	198	0.325686	0.0016		2.22	5481.26	28.68	
Total	199	0.325699			2.26	5661.76		

Id. Bengal (1891) only Pods and Kaibartas

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy
Among castes	1	0.000025		$(56.80)^{-1}$	−0.01	5.75		$(7.00)^{-1}$
Intra-caste	198	0.281080	0.001420		7.73	7964.36	40.21	
Total	199	0.281105			7.72	7970.11		

Ie. Bengal (1891) only Māls and Māl-Pahariās

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy
Among castes	1	0.001460		1.11	0.39	103.68		4.14*
Intra-caste	198	0.260570	0.001320		0.21	4962.72	25.06	
Total	199	0.262030			0.60	5066.40		

II. Uttar Pradesh (1891 and 1941), 4 castes—average values ($n = 100$)

Caste	Nose Index		$x = -\log$ (NI)			y = body length (in cm)			Index from Table IIa	
	1891	1941	1891	1941	Difference	1891	1941	Difference	1891	1941
Brahmins	0.749	0.715	0.128	0.147	–0.019	166.29	165.34	0.95	0.294	0.312
Chhattris	0.783	0.662	0.109	0.166	–0.057	166.18	163.10	3.08	0.275	0.329
Doms	0.835	0.757	0.081	0.123	–0.042	165.53	166.62	–1.09	0.247	0.290
Chamārs	0.859	0.753	0.065	0.125	–0.060	164.99	162.37	2.62	0.230	0.287

IIa. Uttar Pradesh (1891 and 1941). Dispersion analysis of 4 castes ($n = 100$ in each group)

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy	Correlation
Year	1	0.4004		227.88***	–12.44	386.56		11.91***	(–)
Caste	3	0.3106	0.1035	58.93***	4.45	735.36	245.12	7.55***	0.2942
Year x Caste	3	0.0519	0.0173	9.85***	–2.86	535.50	178.50	5.50***	–0.5418
Residual	792	1.3919	0.0018		7.20	25711.58	32.46		0.0380
Total	799	2.1548			–3.65	27369.00			

$x = -\log$ (NI) + (0.001) body length

IIb. Uttar Pradesh only 1891. Analysis of deviations for 4 castes ($n = 100$ in each group)

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy	Correlation
Among castes	3	0.2361	0.0787	41.11***	4.92	109.30	36.43	1.13	0.9688***
Intra-caste	396	0.7571	0.0019		2.43	12715.60	32.11		0.0248
Total	399	0.9932			7.35	12824.90			

$x = -\log(\mathrm{NI}) + (0.001)$ body length

IIc. Uttar Pradesh only 1941. Analysis of deviations for 4 castes ($n = 100$ in each group)

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy	Correlation
Among castes	3	0.1264	0.0421	26.31****	–3.33	1161.57	387.19	11.80***	–0.2749
Intra-caste	396	0.6348	0.0016		4.76	12995.97	32.82		00525
Total	399	0.7612			1.43	14157.54			

$x = -\log(\mathrm{NI}) + (0.003)$ body length

IId. Uttar Pradesh (1891 and 1941). Analysis, as in Table IIa, but with additional observations (1891: 100 each; 1941: Brahmins 176, Chhattris 159, Doms 113 and Chamārs 139)

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy	Correlation
Year	1	0.4771		264.92***	–17.89	670.65	–	21.20***	(–)
Caste	3	0.3747	0.1249	69.34***	4.45	1132.78	377.59	11.94***	0.2158
Year x Caste	3	0.0517	0.0172	9.57***	–1.95	522.60	174.20	5.51***	–0.3748
Residual	979	1.7631	0.0018		13.69	30967.36	31.63		0.0586
Total	986	2.6666			–1.70	33293.29			

III. Uttar Pradesh and Bengal (1891), 3 castes—average values (each $n = 100$)

Caste	Nose Index			$x = -\log$ (NI)			y = body length			Index from Table IIIa	
	Bengal	Uttar Pradesh	Diff.	Bengal	Uttar Pradesh	Diff.	Bengal	Uttar Pradesh	Diff.	Bengal	Uttar Pradesh
Brahmins	70.81	74.89	–4.08	0.153	0.128	0.025	165.59	166.29	–0.70	0.815	0.793
Kāyasths	70.71	78.75	–8.04	0.152	0.106	0.046	163.69	164.76	–1.07	0.807	0.765
Kaibartas	76.60	81.60	–5.00	0.117	0.089	0.028	162.93	162.67	0.26	0.769	0.740

IIIa. Uttar Pradesh and Bengal (1891). Dispersion analysis of 3 castes ($n = 100$ in each)

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy	Correlation
Province	1	0.1636		87.29***	–2.49	37.75		1.09	(–)
Caste	2	0.1487	0.0743	39.66***	11.63	986.37	493.19	14.30***	0.9596
Caste x Province	2	0.0131	0.0065	3.49***	–0.46	46.55	23.28	$(1.49)^{-1}$	–0.5917
Residual	594	0.1129	0.0019		6.18	20491.83	34.50		0.0409
Total	599	0.4383			14.86	21562.50			

$x = -\log(\text{NI}) + (0.004)$ body length

IVa. Analysis of deviation for Kurmis, 1891: in Bihar 71, in Chhotanagpur 100 and in Uttar Pradesh 100

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy	Correlation
Among provinces	2	0.0258	0.0129	7.89***	2.79	509.93	254.97	8.50***	0.7688
Intra-province	268	0.4373	0.0016		4.51	8039.55	30.00		0.0761
Total	270	0.4631			7.30	8549.48			

IVb. Analysis of deviation for Goālas, 1891: in Bengal 41, in Bihar 100 and in Uttar Pradesh 100

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy	Correlation
Among provinces	2	0.0505	0.0252	12.97***	2.55	134.08	67.04	2.29	0.9831
Intra-province	238	0.4631	0.0019		–0.98	6955.32	29.22		–0.0173
Total	240	0.5136			1.57	7089.40			

IVc. Analysis of deviation for Brahmins, 1891: in Bengal 100, in Bihar 67 and in Uttar Pradesh 100

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy	Correlation
Among provinces	2	0.0313	0.0157	8.26***	− 0.89	25.63	12.82	$(2.75)^{-1}$	0.9982*
Intra-province	264	0.4950	0.0019		2.72	9306.87	35.25		0.1267
Total	266	0.5263			1.83	9332.50			

V. Uttar Pradesh (n = 100 each) and Bihar (62 each), 1891, 4 castes—average values

Caste	Nose Index			$x = -\log$ (NI)			Body length (in cm)			Index from Table Va	
	Bihar	Uttar Pradesh	Diff.	Bihar	Uttar Pradesh	Diff.	Bihar	Uttar Pradesh	Diff.	Bihar	Uttar Pradesh
Brahmins	0.734	0.749	–0.015	0.136	0.128	0.008	166.12	166.29	–0.17	0.635	0.627
Chamārs	0.828	0.859	–0.031	0.084	0.065	0.019	161.20	164.99	–3.79	0.567	0.560
Goālas	0.772	0.815	–0.043	0.114	0.091	0.023	163.90	162.88	1.02	0.606	0.580
Kurmis	0.790	0.794	–0.004	0.104	0.103	0.001	163.21	164.02	–0.81	0.594	0.595

Va. Uttar Pradesh ($n = 100$ in each group) and Bihar (62 each), 1891. Analysis of deviations for 4 castes

Source of variation	d.f.	x^2	Mean square (x)	Fx	xy	y^2	Mean square (y)	Fy	Correlation
Province	1	0.0343		13.23***	− 1.82	134.57		3.10**	(–)
Caste	3	0.2828	0.0943	50.56***	12.95	911.84	370.61	10.93***	0.8062
Province x Caste	3	0.0104	0.0035	1.86	− 0.05	480.46	160.15	4.72***	− 0.0208
Residual	640	1.1927	0.0019		2.31	21709.31	33.92		0.0144
Total	647	1.5106			13.39	23236.18			

$x = -\log (\text{NI}) + (0.003)$ body length

VI. Uttar Pradesh (1891 and 1941), 4 castes ($n = 100$ in each group). Dispersion analysis of three features

Source of variation	d.f.	u^2 (nose) height	Mean square (u)	Fu	uv	v^2 (nose width)	Mean square (v)	Fv	vy^2	y^2 (body length)	Mean square (y)	Fy
Year	1	7015.20		669.39***	938.72	125.61		18.86***	-220.36	386.56		11.91***
Regression (y on u and v)	2									574.22	287.11	8.88***
Deviation from regresion					(R 0.8837)					161.14		4.96*
Caste	3	2407.38	802.46	76.57***	22.43	729.08	243.03	36.49***	397.64	735.36	245.12	7.55***
Year x Caste	3	269.31	89.77	8.57***	–45.32	79.12	26.37	3.96***	11.65	535.50	178.50	5.50***
Residual	792	8301.33	10.48		3171.74	5271.63	6.66		603.13	25711.58	32.46	
Total	799	17993.22			4087.57	6205.44			792.06	27369.00		

$x = y - 73.3\,u + 63.9\,v$

VIIa. Distribution of the nose index in 9 centres of the Maratha country

Centre	Nose Index								Total
	54.5–66.5		66.5–76.5		76.5–88.5		88.5–106.5		
	Number								
	Observed	Expected	Observed	Expected	Observed	Expected	Observed	Expected	
Amaravati	6	8.6	17	27.6	35	28.7	14	7.1	72
Aurangabad	14	8.7	33	28.0	23	29.0	3	7.3	73
Barsi	8	7.6	21	24.6	27	25.5	8	6.3	64
Jalgaon	9	8.9	31	28.8	28	29.9	7	7.4	75
Jalna	7	3.4	13	11.1	8	11.5	7	3.0	29
Nagpur	2	6.8	19	21.9	28	22.7	8	5.6	57
Nasik	13	14.6	47	47.1	50	49.0	13	12.3	123
Parbhani	7	8.8	36	28.4	27	29.5	4	7.3	74
Poona	8	6.6	22	21.5	21	22.2	5	5.7	56
Total	74		239		248		62		623

d.f. = 24; $(xu) = 41.49$;* $0.01<P<0.02$

VIIb. Distribution of the nose index in the north and the south districts of the Maratha country

Region	Nose Index								Total
	54.5–66.5		66.5–76.5		76.5–88.5		88.5–106.5		
	Number								
	Observed	Expected	Observed	Expected	Observed	Expected	Observed	Expected	
North	30	38.8	114	125.4	141	130.2	42	32.6	327
South	44	35.2	125	113.6	107	117.8	20	29.4	296
Total	74		239		248		62		623

d.f. = 3; (*xu*) = 14.10;** $P<0.01$

VIIIa. Distribution of blood groups in the south districts of the Maratha country

Region	Blood Group								Total
	0		A		B		AB		
	Number								
	Observed	Expected	Observed	Expected	Observed	Expected	Observed	Expected	
North	71	65.1	34	38.3	40	36.7	3	7.9	148
South	53	58.9	39	34.7	30	33.3	12	7.1	134
Total	124		73		70		15		282

d.f. = 3; $x^2 = 8.66$;* $0.02<P<0.05$

VIIIb. Blood groups: count of p, q, r, by the Stevens method in the north and the south districts of the Maratha country

Region	Gene probability		
	p	q	r
North	0.134	0.158	0.708
South	0.213	0.172	0.615

Appendix

EXPLANATION OF SOME BIOMETRIC TERMS AND SYMBOLS USED

Dispersion:—square of mean quadratic deviation, variance.

Covariance: product of quadratic deviations of two variables and their coefficient of correlation. In the tables both these statistical parameters are given as elements for further computations.

Dispersion analysis:—decomposition of dispersion (variance) into parts due to various sources, most often into parts due to the intra-group and the inter-group variability. For example, in Table Ia the mean squared deviations of the nose index from the mean (x) consist of inter-caste 0.3348, intra-caste 0.0015. Their ratio Fx is equal to 223.20. As this is very large, the difference between the two variations is highly reliable statistically.

In other tables the residual figures as the intra-group variation. Table VI has again some specificity in the conduct of dispersion analysis of three features: nose height, nose width and body length on four castes over two periods. The multiple correlation between average values of both the nose dimensions in them (R) is computed. It was found to be 0.8837, as can be seen from the table. As the sum of squares of height deviations (y^2) over the castes is 735.36, multiplying this by $1\text{-}R^2$ the author obtained the sum of squared deviations from the regression as 161.14. The difference between the two sums mentioned constitutes the sum of squared deviations of the regression.

This manipulation makes it possible to determine the significance of the regression and the deviations from it. Otherwise the dispersion analysis in Table VI is conducted in the usual manner.

Significance level:—If the statistical reliability of the difference between any two statistical parameters (mean, dispersion etc.) is very large, it is generally assumed that the hypothesis on equality of the two statistical quantities has a very low level of significance (i.e. the probability that such anomalies and larger arise by chance is quite low.). In dispersion analysis the level of significance of Fx and Fy depends on the so-called degrees of freedom (see below). There are tables, from which it is possible to find out for a given degree of freedom the values of Fx

and *Fy*, corresponding to a certain level of significance. If the level of significance is extremely small (i.e. the difference between the variations is statistically beyond any doubt), the author uses the sign***. If the level of significance is between 0.01 and 0.05, the author puts the sign**. But if the level of significance is of the order of 0.01 (i.e. if the probability of a chance emergence of such and larger differences between the variations is not more than 0.01), the author uses the sign* (for example, in Table Ic for *Fy*). For higher levels of significance i.e. if the difference is unreliable, no sign is placed with *Fx* and *Fy*.

Degrees of Freedom: (*d.f.*) figure in the three tables appended in the article:

(1) In the dispersion analysis the number of degrees of freedom is one by which the sum of squared deviations (x^2 or y^2) is divided to obtain the mean square. Formally it is defined as the number of variables out of which the sum of squared deviations are computed minus the number of those quantities from which the deviations are derived. Thus, in Table Ia the total sum of squared deviations has the number of degrees of freedom, equal to the number of observations minus one (600-1) and the sum of square deviations among castes, to the number of castes minus one. The sum of squared deviations within a caste has the number of degrees of freedom, equal to the difference between the two numbers obtained earlier (599-5).

(2) In Table VI the number of degrees of freedom of the equation of regression of the body length on the nose height and width is as per the general rule, equal to the number of parameters of the regression equation minus one. In this case it is 2 and deviation from the regression has one degree of freedom.

(3) In Tables VII and VIIIa the degrees of freedom are used for determining the level of significance of the value of x^2, for evaluating the extent of divergence between the observed frequencies of the feature and the expected ones on assuming a random distribution of the feature over geographic divisions. There are tables for determining the level of significance of x^2 according to the number of degrees of freedom. In Tables VII and VIIIa the number of degrees of freedom is equal to the product of the number of classes of the feature minus one and the number of geographic divisions minus one.

Correlations in Tables I-V are the result of dividing the numbers in *xy* column by the number of degrees of freedom and the square root of the product of the mean squares x and y. Signs***, **, and * denote the levels of significance (of the hypothesis on an absence of correlation).

The best linear discriminant index: placed below Tables Ia, Ib, IIb, IIc, IIIa, Va and VI and often used in the text (the first two adjectives are always dropped except when first introduced), is a complex numerical characteristic, taking into account two features: nose index and body length (and in Table VI, three features: nose height and width and the body length). For the first feature the coefficient equals 1, for the second (and the third) coefficients are chosen so that the ratio of the intergroup variation of the discriminant index to the inter-group one assumes a maximum value. While determining such an index one has to solve an equation with the exponent equalling the number of features. One of these solutions gives us the opportunity to compute the coefficients of 'weight' of the features, leading to the maximum intergroup variation (compared with the intra-group). This solution is adopted for constructing the best linear discriminant index.

SECTION IV

Texts, Words and Literary Criticism

35

On the Authorship of the *Śatakatrayī*[*]

In the course of preparation of a definitive critical edition of the *Śatakas* [*nīti, śṛṅgāra, vairāgya*] ascribed to Bhartṛhari and familiar to every student of Sanskrit literature, the most puzzling of the many problems that arose was of the authorship. Of course, a view has been propounded, which we shall have to consider later on, that the *Śatakas* are a mere anthology, so that discussing the author would be futile. But admitting for the moment the possibility of a unitary authorship, can anything be said about the author himself?

1. *Four Major Claimants*

There are four major claimants, besides the actual author or authors of the *Śatakatrayī* stanzas, for the honour of being labelled *the* Bhartṛhari, namely (1) The seventh-century grammarian known as author of the *Vākyapadīya*. (2) A king of Central India, of unknown date. (3) A pontiff of the Kānphāṭā sect of ascetic almsmen. (4) The pseudo-Bhartṛhari [or pair!] who wrote the *Vijñānaśataka* and (or) the *Viṭavṛtta*. The last of these may be disposed of very quickly, but the first three have legends that have overlapped or even overlaid each other; inasmuch as we have nothing better to go upon, these legends must be discussed in some detail. Before making the best of such doubtful evidence, the name itself may be considered for a moment.

The form given in most MSS is Bhartṛhari. A common mislection is Bhartṛhara, even Bhatṛhari or Bhatṛhara; in the south, particularly in Telugu country or MSS influenced by Telugu sources, the name is pronounced and usually written Bharttulahari or Bharttṛlahari. Aufrecht, in

[*] *Journal of Oriental Research*, vol. 15 (1945–46), pp. 64–77.

his catalogue of Bodleian Sanskrit MSS reports the variant Bhartṛhema from MS No. 247. However, the name itself might be merely Hari, with a prefix; at least, Pūrṇasarasvatī, in his commentary *Vidyullatā* on the *Meghadūta* of Kālidāsa, commenting on the compound *katipaya* gives parallels from the *Vairāgyaśataka* with the note *iti Harivacanāc ca*. Several MSS at the Scindia Oriental Institute of Ujjain [particularly the colophons of Nos. 669, 711, 6360, 782, 6064] give the author or translator into Marāṭhī as Harikavi, which has caused a good deal of confusion, but the most reasonable interpretation seems to be that Harikavi is merely the equivalent of Bhartṛharikavi. At the end of the first kāṇḍa of the Vākyapadīya, Harivṛṣabha occurs, taken again as a reference to the grammarian author Bhartṛhari, but here at least there is the possibility that this may indicate some Harivṛṣabha as having commented upon the first kāṇḍa while Helārāja, to whom the commentary on both the sections is ascribed, commented only upon the second section. Taking Hari as the name, the prefix *bhartṛ* of unknown honorific or dedicatory significance like the *bhā* of Bhāviveka, Bhāmaha, Bhāravi, does not help much in dating the author. There are known with the same prefix, a kṣatrapa Bhartṛdāman [AD 284–9], son of Rudradāman II. Bhartṛsvāmin, author of the difficult grammatical poem *Rāvaṇavadha* or *Bhaṭṭikāvya* belongs to the period 500–650, and is sometimes identified with the author of the *Śatakatrayī* though only on the grounds that *Bhaṭṭi* in Prākrit is the equivalent of Bhartṛ. One Bhartṛprapañca flourished *circa* 500; Bhartṛyajña who commented upon Kātyāyana's *Śrautasūtras* before 800; Bhartarīśvara [= *Bhartṛ* + *īśvara*] is cited by Umbeka in his commentary upon Kumārilabhaṭṭa. The anthologies contain verses by Bhartṛmeṇṭha or simply Meṇṭha, who wrote under the poet-king Mātṛgupta of Kasmir; verses are also found ascribed to Bhartṛsārasvata. The prefix, by itself, cannot therefore date our poet, though it seems to show that the date could hardly be pushed back beyond the opening centuries of the Christian era.

2. *The Grammarian*

This particular Bhartṛhari is fairly easy to eliminate. He closes the long line of outstanding grammarians who shine from Pāṇini down, being the one able successor of Candragomin. Something definite of his life is known from the narrative of the Chinese Buddhist pilgrim I-tsing [*A record of the Buddhist Religion* . . ., Trans. J. Takakusu, Oxford 1896] who travelled in these parts in AD 671–95. His narrative fixes the death of the grammarian Bhartṛhari as AD 651–2. I-tsing's account on pp. 178–80 with Max Muller's discussion on p. xiv identify this Bhartṛhari quite conclusively as the author of the *Vākyapadīya*. The only reason, however, for ascribing the *Śatakas* to him seems to originate from I-tsing's statement [p. 179] that he became seven times a priest only to return to the laity. This is supposed to fit the 'dual personality of the Indian', forever oscillating between the two opposed poles of sensuous enjoyment and ascetic renunciation. Unfortunately for this sort of criticism, I-tsing speaks of his grammarian-monk with evident admiration because he left the monastery whenever he felt that the impure thoughts which entered his mind might sully its precincts. In fact, Bhartṛhari died a lay-brother, *upāsaka*. A voluptuary who came because of dissatisfaction and went back to enjoy himself would have been mentioned only with contempt, even if the monastic rules of the seventh century had been lax enough to permit him such constant alternation. Of course, there is no mention of the grammarian having composed the *Śatakatrayī*, or even one of the *Śatakas*. To this must be added the fact that not only in the critical text under preparation where I have had to restore *juhvantam, ādhikyatama*, etc., but even in all the smoothest MS versions known of the *Śatakas* there occur solecisms like *śikṣatu* which no strict grammarian could possibly tolerate, and one sees that the author of the *Vākyapadīya* is an unlikely candidate for the honour. The same argument applies, incidentally, against the author of the *Bhaṭṭikāvya*, which is an epic poem deliberately written to illustrate grammatical forms, and read for that purpose rather than as poetry. Allowing for the maximum development any hardworking intellectual could be expected to achieve, it seems unlikely that a single mind could stretch from the formidable difficulties of Sanskrit grammar so ably handled in these works to the brilliant expression and loose syntax of the *Śatakas*. At this point, one may as well dispose of the legend started by the learned but optimistic G. Bühler, who conjectures in answer to Takakusu's inquiry [p. 225] that the *Pei-na* which I-tsing stated to be the grammarian's best work might be the *Beḍā-vṛtti*, a commentary on the *Janmāmbhodhi*—supposedly a philosophical work of the type reported. The MS. of which the name prompted Bühler's conjecture is in the Bombay Government collection at the BORI, being No. 227 of 1873–4 = 381 of 1879–80. It has nothing whatever to do with Bhartṛhari, or grammar, or philosophy, or even poetry, being a work on astrology [*phalajyotiṣa*] written or copied in AD 1650 by a Jain called Rāmachandra, pupil of Sumatisūri.

My learned friend and former colleague Dr V.V. Gokhale of the Fergusson College, Poona, has tentatively restored from the original Chinese the stanza of Bhartṛhari, reported by I-tsing [p. 179], as

rāgān nivarte saṃsāram nirlobhī cīvaraṃ vase ।
katham etad dvayen' āsmi bālavat parihāsitaḥ ॥

Of the nearly 900 stanzas that I have found ascribed to our poet Bhartṛhari by various sources, not one approaches this remotely. Of the stanzas in the *Śatakas*, just one, i.e., *maṇih śāṇollidhaḥ* is utilized in the Vākyapadīya commentary (II) by Helārāja, and then not specifically ascribed to any one.

3. *The King*

In the history of Tāranātha [Schiefner, *Tāranāthas Geschichte d.Buddhismus*, p. 195] there is a reference to a king of Mālava by this name, in the form Bharthāri [which is approximately the form still found in MSS from Rajputana, i.e., Bharatarī or Bharatharī]. This Bhartṛhari's sister was married to Govicandra, and the king himself descended from an old line, not then extinct, of Mālava kings. The time is given very approximately as that of Dharmakīrti's death or later; if the logician Dharmakīrti is meant, and any credence can be given to Tāranātha's vague narrative, the king Bhartṛhari must be taken as having lived not earlier than the end of the seventh century AD. No further information about the king is given. However, the mention of the thaumaturge Jālandhara a page or two later shows that this Bhartṛhari is unquestionably connected with the next on our list.

4. *The Nātha Bhartṛhari*

George Weston Briggs's standard work *Gorakhnāth and the Kānphāṭā Yogis* [Calcutta, 1938] contains most of what is generally known about the sect, though very little occurs there which could be of any use in our problem. Some of the chronology is rather mixed, as the Vikramāditya whom Briggs [p. 244] puts at 1076–1126 would presumably be the hero of Bilhaṇa's *Vikramāṅkadevacaritam*, ruler of Kalyāṇī and not Ujjain, certainly not the brother of our Bhartṛhari, who is mentioned as a poet long before that date. The one indigenous unutilized source-book I have been able to find is the *Navanāthabhaktisāra* [cited as *NNBS*], a Marāṭhī version of the unpublished *Gorakṣa Kimiyāgāra*. This rendering in *ovī* metre covers 40 adhyāyas, and was promulgated in *śaka* 1741 = AD 1819 by one Mālū Narahari, son of Dhuṃḍī. The story of Bhartṛhari, one of the nine chief leaders of the Nātha sect is given mainly in adhyāyas 24–30 of the *NNBS*. The name supposedly means a begging bowl *bharatari mhaṇatī bhikṣāpātrāsī* [*NNBS* 1–88; 24–11] perhaps related to the Hindi *bartan*. The hero was born of the seed of the deathless sage Maitrā Vāruṇī ejected into his almsbowl, which conceived thereby; none of the nine siddhas given in the final śloka of *NNBS*:

> *Gorakṣa-Jālandhara-Carpaṭāś ca*
> *Aḍbaṅga-Kānīpha-Machindarādyāḥ*
> *Cauraṅgi-Revāṇaka-Bhartri-sañjñā*
> *bhūmyām babhūvur navanāthasiddhāḥ*

was born of woman. Bhartri here is syncopated from Bhartṛhari. He was able to understand the language of animals, which enabled him to help Vikrama obtain the kingdom of Ujjain; for this, Vikrama regarded him as his brother [bandhū mānilā bhāvārtheṃ *NNBS* 27–61], and bestowed a kingdom upon him. Having lost his beloved consort Piṅgalā, Bhartṛhari remained incosolable upon the cremation ground till Gorakṣanātha turned up, rerstored not one but twenty-five identical Piṅgalās by his superhuman powers, so converted the king to asceticism whereby he assumed his place among the nine principal leaders (some lists show 84 and even more) of the sect.

The play *Bhartṛharinirveda* by Hariharopādhyāya shows how popular this theme of Bhartṛhari's renunciation is among modern poets, but there is no evidence—in spite of the marginal 'bharatharī' in MSS—to show that king Bhartṛhari or Nātha Bhartṛhari ever wrote any poetry. The palpably interpolated stanza '*yāṃ cintayāmi*' which is found in many northern versions gives, according to all commentators of the *Śatakas*, a different reason for the renunciation. One would have imagined that the composers of the *Gorakṣa Kimiyāgāra* would have been literate enough to add Bhartṛhari's *Śatakas* to the triumphs of their sect, but there is no evidence to that effect. Of course, modern Nāthapanthīyas make up for this; for example, MS A_3 of my critical edition has the marginal dedications *Jālandhara* or *Nātha*. Rajendralal Mitra reported in his *Notices* [X, 3325] a MS of the *Vairāgyaśataka* with a commentary by Śrī Mīnanātha, who should be the Nāthasiddha of that name, perhaps identical with Matsyendra or Macchindernāth. Possibly, some of this is due to confusion with Central Indian kings of ancient days whose names began with Bhartṛ. Tod reports in his 'Rajasthan' the tradition that the city of Bhartehwar was founded by king Bhartṛhari. Purohit Gopi Nath, in the preface to his edition of the *Śatakatrayī* speaks of the former residence and a *samādh* of Bhartṛhari at Alor, near Sehwan on the Indus [*see also* Sobhraj Nirmaldas in the *J. Sind Historical Soc.*, vol. VII, Pts. 1–2, July 1944, pp. 1–5], where the royal ascetic is supposed to have lived in exile. I am told that at or near Alwar there is another funerary monument of Bhartṛhari, as a place of pilgrimage for Kānphāṭā yogis; one more *samādh* is recorded by Briggs [p. 102] at Tilla, while followers of the sect have a shrine of some sort in Chunar fort though the cave of Bhartṛhari is shown near Ujjain. Apart from this extensive necrosis, we have the *NNBS* 40–94 tell us that the *siddhas* moved about openly till *śaka* 1710 [though *NNBS* records Bhartṛhari's birth at 3103 of the Kali era], and then disappeared into their secret places, Bhartṛhari's being pātāḷa; at the same time, several of them—not, apparently, including Bhartṛhari—took their leave of this earth in *śaka* 1000 [*NNBS* 23–173].

Naturally, all this does not enable us to date the Bhartṛhari concerned; the most we can conclude is that it is difficult for any ordinary mortal to extract historical information from the confused accounts of the Nātha-panthīya tradition. For the traditional association of Bhartṛhari with the Vikramāditya who is supposed to have established an era at 57 BC., one can discover even less real support. Analyzing the Vikrama tradition, it seems to me that the first Vikramāditya is the Gupta king of the sixth century,* the actual era of about 57 BC dating less probably from the victory of a single great though unidentifiable king than from the approximate period of a popular Brahmanic revival which pushed back invaders all over the country. I base this upon a study of the two prophecies in the Āraṇeyaparvan of the *Mahābhārata* [adhyāyas 183–6 in V.S. Sukthankar's critical edition], combined with the account in the *Kalkipurāṇa*, the story of the Jain ācārya Kālaka, and finally the coincidence [as nearly as can be ascertained from the earliest recorded dates] of the Kalki and the Vikrama era. One can hardly look for the accurate placing of the younger brother of a historical fiction.

5. *The Two Pseudo-Bhartṛharis*

The fourth group may also be disposed of without any trouble. The *Viṭavṛtta* is Madras Government MS. D. no. 11983, bound together with what purports to be a sort of a commentary on it by one Mādhava, the *Jaḍavṛtta*, D. no. 11970. The ascription of the former to Bhartṛhari rests upon the following stanza in the latter:

upakṛtaye viṭavṛttaṃ paṭumatir akaroj janasya bhartṛhariḥ
jaḍamatinā jaḍavṛttam mādhavanāmnā mayā tu racitam idam

The only stanza in the rather obscure *Viṭavṛtta* which I have been able to find anywhere else is the maṅgalācaraṇa, namely *nitambālasa-gāminyā* . . ., which does occur as no. 10 in the *Subhāṣitāvali* of Vallabhadeva (or rather ascribed to Vallabhadeva, for it seems to be virtually identical with the unpublished *Subhāṣitāvali* of Śrīvara in the BORI MS collection).

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*More accurate date would be the second half of the fourth century.

The *Vijñānaśataka* was published, as a work of Bhartṛhari, edited by Krisnasastri Bhausastri Ghule at the Goraksana Press, Nagpur 1897. The edition is long out of print, though one copy exists in the Bhandarkar collection at the BORI, while another was received on loan by courtesy of MM. V. V. Mirashi, Principal of the Morris College, Nagpur. This latter copy has [on the margin, in red ink] variants noted from the original MS, which MS itself is apparently the fourth *Śataka* of Bhartṛhari referred to without details in the preface to Hiralal's Catalogue of MSS in Central India. There is a current edition of the *Vijñānaśataka* published by the Gujerati Press, Bombay, first issued in 1905. Though the order of the stanzas [of which two are omitted altogether] and some minor readings differ, I have been unable to ascertain whether this edition derives from another MS or from a mere arbitrary rearrangement of the Nagpur edition, [the latter seems the likelier alternative], and there is no reason to believe that any other MS of the *Vijñānaśataka* exists except the one owned by the Ghule family at Nagpur. The Ghule MS was found in the collection of the editor's great-grandfather Sadasiva, in a rather damaged condition. A colophon claims the work for Bhartṛhari while the final śloka makes it the fourth of the *Śatakas*. The editor himself believed it to be authentic on these grounds plus an occasional similarity of phrase with the *Śatakatrayī*; to others, however, including MM. Mirashi, [not to speak of myself], it seems clearly a late and not particularly able forgery. For our purpose, it suffices to note that not a single one of the stanzas of either the *Viṭavṛtta* or the *Vijñānaśataka* is found in any MS of Bhartṛhari's *Śatakatrayī* in spite of the fact that the MSS of the *Śatakatrayī* that I have been able to collect show a total of well over 600 different stanzas; nor is any such stanza ascribed to Bhartṛhari in any anthology, no. 10 of the *Subhāṣitāvali* being labelled *Viṭavṛttasya*. Krsnachariar reports a *Śānti-paddhati* of Bhartṛhari published in Bombay, which I am unable to trace; it may be the *Śāntiśataka* of Śilhaṇa.

6. *The Poet Bhartṛhari*

Nothing has been said in all the foregoing that can be regarded as a positive contribution to the authorship problem as regards the *Śatakatrayī*. As for the *Śatakatrayī* being an anthology, it will be seen from a paper of mine in the next issue of the JBBRAS that there is a substantial nucleus of the stanzas left after discarding those not found in all established versions. Though the work could not originally have been a *Śatakatrayī*, there is some sort of a common source for all the extant MSS, so that at best one can say that the anthology is of stanzas ascribed to Bhartṛhari, though the compendium was probably made long after the author's death. Now a poet Bhartṛhari is mentioned in the literature, so that an attempt at tracing him might be worth while.

Somadeva, in the fourth *āśvāsa* of his *Yaśastilakacampū* [AD 959] puts Bhartṛhari in the long list of the great poets, *mahākavis*, who spoke favourably of the almsman's life [*Kāvyamālā* 70, II, p. 113]. Somadeva's list contains such great names as Kālidāsa and Bhavabhūti, but also some others of whom nothing is known; technically, a *mahākavi* must deal with an epic theme in a connected narrative poem, or drama, but we might waive the point here and take the epithet literally, because nothing is known of Bhartṛhari beyond [at most] the quasi-anthological *Śatakas*. Somadeva's is the earliest dated reference to a poet Bhartṛhari. Pandit Bhīṣmācārya, in his *Mahānubhāva* [old Marāṭhī] grammar of the thirteenth century gives an example of a simile '*jāisā bhartṛharicā vairāgya*', which is rather ambiguous, being more likely to refer to king Bhartṛhari's renunciation than to the author of the *Vairāgyaśataka*. If the king could be dated with or without reference to the date of Dharmakīrti and Gorakṣanatha as not decidedly earlier than the thirteenth century, we can dispose of the royal authorship of the *Śatakas* because there is an indisputable citation of our poet in the *Prabandhacintāmaṇi* [AD 1304] of the Jain *ācārya* Merutuṅga. The legend repeated in the last section of that work was unquestionably not of recent origin; it gains interest by containing elements of the combined sagas of our first three Bhartṛharis. That is, according to Merutuṅga, not Bhartṛhari but his father is a grammarian who worships Gaṇeśa and succeeds in obtaining at the risk of his own life direct grammatical instruction for six months from the divine teacher. He then returns to Ujjain, is cared for by a prostitute [*veśyā*] on whose doorstep he had fallen asleep during the night from exhaustion caused by the journey, has a disputation at court, and becomes famous as the outstanding grammarian. Then he marries four wives, one from each of the major castes, and has a son by each, the one begotten of the *kṣatriya* wife being Vikrama; Bhartṛhari is son of the lowest, the *śūdra* woman while the other two brothers are not named in this particular version. The poor outcast has to sit in a cellar below his socially admissible brothers and signal understanding by tugging at a rope leading to his teacher, who teaches Sanskrit to all four. In a fit of anger at Bhartṛhari's obtuseness the tutor calls him *re veśyāputra*, son of a whore, which may be only a term of abuse, but is reminiscent of the hospitable meretrix who sheltered the grammarian father. The narrative at this point is further obscured by the fact that the stanza *dānaṃ bhogo nāśas* which is being explained by the pedagogue is unquestionably authentic in Bhartṛhari's *Śatakas* while the śloka *āyāsaśatalabdhasya* with which the cantankerous pupil Bhartṛhari is supposed to have countered occurs in the *Tantrākhyāyikā* without attribution, and is found in one of the two hundred odd MSS of the *Śatakatrayī* which I have personally examined, being reported in only one such MS anywhere, i.e. in Telang's MS *A* [Kathavate].

The real importance of Merutuṅga's story derives from its concluding phrase *tena bhartṛhariṇā vairāgyaśatakādi prabandhāni bhūyāmsi cakrire*. This must be the poet in whom we are interested, whatever the credibility of the legend, and we may be certain that the *Vairāgyaśataka* was well established by the thirteenth century AD while its author had become legendary, or such a report would not have gained currency. To anticipate what belongs to a later discussion, let us state that the *Vairāgyaśataka* comes out very badly stripped by the critical editor's work, not more than 30 stanzas being above suspicion while not more than about 55 could be included as authentic on the most generous canon of textual criticism. The other two *śatakas* are much better off with approximately 75 stanzas each.

As a matter of fact the Merutuṅga legend is also unreliable. P. von Bohlen cites in the preface to his edition of the *Śatakas* the authority of Colebrooke and a MS of Śivadāsa's *Vetālapañcaviṃśati* to the effect that Bhartṛhari and Vikrama were sons of king Candragupta. Mr Seshagiri Sastri [*Ind. Ant.* 1, 314] records an undocumented legend making Bhartṛhari the son of a Brahmin Chandragupta, again with Vikrama the son by a *kṣatriya* wife, etc. The full legend can be found recorded in its southern version by K.V. Subrahmanya Sastri, formerly Sanskrit Pandit at the Madura College, in his *Śaṅkarācāryacaritram*. Here the Merutuṅga story of the father is paralleled (except that the *veśyā* is replaced by a *vaiśyā*) but we see that the real strength of the tradition comes from the line of Indian grammarians, later connected with the origin of the Vedantic doctrine. The father is the Brahmin Candraśarmā, reincarnation of Patañjali, he frees Gauḍapāda from a curse which turned him into a *rākṣasa*, learns the *mahābhāṣya*, transcribes it on leaves, and then reaches the royal court (presumably at Ujjain) to marry his four wives for the spread of the grammatical doctrine into all castes.

It seems to me that all the elements of the other parallel legends can be resolved here by identifying Candraśarman or Candragupta with the grammarian Candragomin, while Bhartṛhari would be the Vākyapadīya author. This saga of the grammarians cannot be traced far back from written records, but one finds a good version in Rāmabhadra Dīkṣita's *Patañjalicaritam* [*Kāvyamālā* 51] where the story is fairly well given along the lines just traced, and Bhartṛhari is called author of the *Vākyapadīya*, in viii-11, while viii-10 ascribes the three *Śatakas* to him. We are back again where we started.

7. *Minor Legends*

A Bhartṛhari mentioned in the *Bhaviṣyapurāṇa* can be our poet but not the king. The stanza is *jayanto bhartṛharaye lakṣasvarṇena varṇayan; bhuktvā bhartṛharis tatra yogārūḍho vanam yayau*. The Bhartṛhari who would accept a hundred thousand pieces of gold from the unknown Jayanta, enjoy the bounty, and then betake himself to the forest as an ascetic would, if he existed, be rather the poet than the king. It is interesting to note that the *Nītisāra* section of the *Garuḍamahāpurāṇa* contains stanzas which occur in the *Śatakas*, but according to Dr A.P. Karmarkar (to whom I owe both these paurāṇic references) the latter *purāṇa* in its present from belongs to the post-Madhvācārya period.

Eminent Jains usually identify the *Śatakatrayī* author with that of the *Vākyapadīya*. This stand was taken at one time, though abandoned soon, by the veteran Jain scholar Sri Nathurama Premi in the preface to his edition of Śubhacandra's *Jñānārṇava* [Rāyacandra-jaina-śāstramālā 5–7–9, Bombay NSP 1907]. This preface gives on pp. 9–14, a Hindi translation of Śubhacandra's 'biography' from the *Bhaktāmaracaritra* of Viśvabhūṣaṇa, pupil of Anantabhūṣaṇa, which makes Śubhacandra and Bhartṛhari twin princes; Bhartṛhari takes to yogic practices, but is converted to Jainism by the superior powers of the twin. In support of Bhartṛhari having been a Jain, Sri Premi cited the *Vairāgyaśataka* stanza

> *ekākī niḥspṛhaḥ śāntaḥ pāṇipātro digambaraḥ* ।
> *kadā'haṃ sambhaviṣyāmi karmanirmūlaṇakṣamaḥ* ॥

Now, although we have a considerable number of unquestionably Jain MSS for the *Śatakatrayī* critical apparatus, including many of the Dhanasāra version, this stanza never occurs as reported here. It is quite as authentic as any other, and one of the very few that has no real variants. But the correct reading of the third quarter is *kadā śambho bhaviṣyāmi*, the changed reading enables *digambaraḥ* to be taken as meaning Digambara Jain, but there is actually no MS evidence for it. Sri Premi further reported [p. 4 of his preface] the *Rāhatakāvya* as a work of Bhartṛhari, but cannot recall his source now. Not only have I been unable to find any notice of any such work by Bhartṛhari or anyone else, but the word *rāhata* does not seem to be Sanskrit at all. There is such a Hindi word meaning luxury or dissipation.

8. *Text Criticism*

There is nothing left for it but what we can get about the author from the work itself, seeing that external evidence is so scanty as well as so confused. A favourite type of unsound argument is that of K.T. Telang, who concluded that Bhartṛhari was later than Kālidāsa but a good deal earlier than the sixth century! The arguments, given on p. xiii *et seq*. of Telang's preface to his edition (Bombay 1893) of the *Nīti* and *Vairāgya* are risible because he had not a critical text before him, either of the *Śatakas* or of works like the *Pañcatantra*. This lack has been remedied in later time, and we find in Edgerton's reconstruction of the oldest level of the *Pañcatantra* that a certain number of stanzas there are found in our texts. In particular *satyānṛtā ca paruṣā* seems to be common to both. Though the grounds on which these stanzas were admitted by Edgerton's may not in all cases be the same as those on which we admit our own stanzas in the critical edition of the *Śatakas*, it still seems reasonable to assume that the earliest genuine stanzas of the *Nītiśataka* date from the opening centuries of the Christian era, tentatively, not later than about the third century. As for the stanza common to Kālidāsa and Bhartṛhari, *bhavanti naṃrās taravaḥ* which occurs in *Śakuntalā* V as well as the *Nītiśataka* [all versions], we can then say that Kālidāsa must have taken it from the proverbs current in his day—which day would presumably be the Gupta period. The *Vākyapadīya* Bhartṛhari would be eliminated by this, and also the Nātha guru, whether identical with Tāranātha's king or not. The references to the ten *avatāras* of Viṣṇu, to *śaka* maidens, to the Ardhanārī Śiva, are each open to objection as omitted in one or more well-determined versions; none of them can be used for dating the text as a whole.

There is nothing specifically Buddhist or Jainistic about the *Śatakas*. It will, however, surprise most readers to learn that there is also nothing really Vedantic about them. The stanza *ekākī niḥspṛhaḥ* is genuine, but the mention of Śambhu there is perfunctory; the śaivite maṅgalācaraṇa stanza *cūḍottaṃsitacārucandrakalikā* is also genuine, but hardly deep Vedānta; dedication to some god or goddess of the sort is customary, though it says little about the actual religion of the writer. For example, the Buddhist Harṣa's *Nāgānanda* is charged with Gaurī worship. All the usually familiar vedantic stanzas in Bhartṛhari, as for example most of those in the southern *paddhati* labelled *avadhūtacaryā* drop out of any critical text based upon the evidence as a whole. The thoroughly vedantic maṅgalācaraṇa *dikkālādyanavacchinna* is also not original, though apparently a fairly early addition. One might as well call him a Vaiṣṇava because his name was Hari, or because of *itaḥ svapiti keśavaḥ*.

Looking at the verses as a whole, in any text, version, or recension, one is struck as was Winternitz [*Geschichte d. Indischen Literatur* III, 137], by the marked impression of unitary authorship. The truth of the matter is, obviously, that a certain type of stanzas had been associated with the name of Bhartṛhari from the earliest times, and these attracted others by similitude (as in the case of the easily removed vedantic accretions) which rounded out the work. The only explanation for the remarkably divergent versions combined with the manifest desire in even the oldest (sixteenth century) MSS to include all possible Bhartṛhari stanzas can come by assuming a later popularity for the work combined with early neglect. Taking only the authenticated stanzas, we find an unquestionable note of frustration dominant throughout: *boddhāro matsaragrastāḥ prabhavaḥ smayadūsitāḥ, abodhopahatāś cānye jīrṇam aṅge subhāṣitam.*—The learned were consumed by jealousy, the lords of the earth by pride, and the rest too ignorant, so that the poet's epigrams had to wilt within him. The *vairāgya* desired by Bhartṛhari is always to be in the future conditional, not actually experienced, the *śṛṅgāra* again smacks less of a voluptuary's practice then unsatisfied desire taken out in literary exercise of the imagination.

The background of the poet's figures of speech and phraseology is unquestionably Brahmanical, though not in the sense of argumentative religious contrast with other sects. No king who had renounced would have given the advice of the stanza *agre gītaṃ* : 'If before you you have the songs of accomplished southern poets and behind you the tinkle of ornaments worn by whisk-bearing attendant maidens, then be a glutton for worldly pleasures; if not, O! mind, hasten to enter into undisturbed contemplation'. But the ordinarily Brahmanical turns are quite convincing: in *na kaccic caṇḍakopānām*, he says that the king's wrath burns even those who serve him as does the fire its officiating priest. If one has wealth, caste be consigned to the nether world: *jātir yātu rasātalam*. Why read the scriptures [*kiṃ vedaiḥ smṛtibhiḥ purāṇapaṭhanaiḥ śāstrair mahāvistaraiḥ*] when everything but realization of the inner spiritual joy is mercenary [*vaṇigvṛttayaḥ*], shopkeeper's practices? When begging, the pious high-caste people whose doors are dark with the smoke of many sacrificial fires are to be approached by preference: *puṇye grāme vane vā . . . ādāya nyāyagarbhadvijahutahutabhugdhūmadhūmropakaṇṭham.*

Still restricting ourselves to reasonably well-confirmed stanzas, we can say that Bhartṛhari shows no acquaintance with any trade or profession except that of a hungry poet. The śloka *dīnā dīnamukhaiḥ* says, in effect: 'If he did not visualize his wife as seen by other men to be miserable, sad of countenance, always surrounded by pitiful, crying, hungry children, what man of self-respect would beg for the sake of his own accursed belly in quavering broken words that die in his very throat for fear of refusal?' It would not be surprising if such a writer had to await the rise of a considerable, Sanskrit-knowing, technically competent class before he could find his due measure of appreciation. He was aware of the poet's type of immortality:

> *jayanti te sukṛtino rasasiddhāḥ kavīśvarāḥ*
> *nāsti yeṣām yaśaḥkāye jarāmaraṇajanmabhīḥ*

This matches Horace's 'Exegi monumentum aere perennius', and the fervent hope 'Non omnis moriar, multaque pars mei, Vitabit Libitinam.'

Yet, could he have foreseen the future, it must have been a peculiarly galling thought to him, after having suffered all the misery and shame that peeks through his verses, that far from living as an actual person in future ages, even his existence would one day be in doubt, to be thrashed out as a serious question in a painful and inconclusive manner by helpless scholars.

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Some Extant Versions of Bhartṛhari's *Śatakas**

While Bhartṛhari's *Śatakatrayī* is familiar to anyone who has even a smattering of Sanskrit, it is not realized except by those who have had to compare Bhartṛhari MSS from widely separated sources that the material shows an enormous variability. Printed editions from different parts of the country show a spurious uniformity, partly because the later tend to be influenced by the earlier, while the earliest have been based upon unrepresentative MSS (see note on version W below). The first printed edition known is that by William Carey at Serampore, 1803–4, printed together with an edition of the *Hitopadeśa*. This was based 'upon three different MSS, each of which ended at a different place', hence frankly eclectic though that did not matter in view of the fact that the work made no pretensions to be a critical edition, being intended merely as a textbook. Copies of this edition do not seem to be available in India, apparently because the Serampore College press was struck by lightning in 1812 and all copies of printed works then in stock lost. Study of a microfilm obtained from the India Office (by courtesy of the Bombay University Library) shows that this edition has a *śṛṅgāraśataka* based upon version W of this note, a *vairāgya* which is an inflated W, and a *nīti* of Northern type which cannot be more closely identified. This edition was atrociously reprinted in Haeberlin's anthology, the *Kāvyasaṅgraha* (Calcutta, 1847), and thereafter with emendations in successive local editions. In the meanwhile, P. von Bohlen's more imposing edition (Berlin, 1833) had appeared. This follows, again, the general scheme of the Serampore edition as regards the *śṛṅgāra*, but in the other two makes use

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of Abraham Roger's translation of about 1630, published by Thomas de la Grue in a French retranslation from the Dutch original at Amsterdam in 1670. Some of Bohlen's identifications of the original ślokas from this translation are definitely wrong; in addition his synoptic charts (the first of Bhartṛhari versions so far as I know) of the *nīti* and *vairāgya* have a few more errors because his extraneous source (*B*), the India Office MS 2539-*e*, has a different order for the *śatakas*. But for the misidentifications from Roger's translation and an insistence upon a hundred for each century, Bohlen would have had a fair approximation to the southern recension. This edition was succeeded, though not copied, by several lithographed versions at Bombay and Poona all of which gave much the same order of stanzas, being representatives of our W, and so created the false impression of uniformity that Aufrecht describing Bodleian 246 (Bodleian MSS Cat. VII, p. 133) which seems to belong to our B version was puzzled by the totally new order, which seemed to him a deviation (Distichorum ordo nescio quibus de causis prorsus immutatus est), though actually it is as justified as any other order. For comparative purposes, however, nothing seems to have been done till the appearance of Kasinath Trimbak Telang's edition at Bombay in 1893. This edition of the *nīti* and the *vairāgya* has definitely influenced most of the succeeding Indian editions, though Telang follows the Bombay lithographed edition for his basic text and cites variants from it. His charts of 17 sources for *nīti* and 14 for *vairāgya* were meant primarily for help in collation, but are less useful for a critical edition as no versions were established, the sources are contaminated, while several MSS used are incomplete or defective. The omission of the *śṛṅgāra* is very serious, as the *śatakatrayī* must be considered in its entirety; the occurrence of the same stanza in different centuries in different versions, and on occasion even in the same version proves this conclusively. Finally, his representative of the southernmost version (our Y), namely the N which he thought represented 'the recension universally current in the South', was almost certainly of the Ramacandra Budhendra type, as the stanza *śakyo vārayitum* is included which is found only in this subgroup of the Telugu branch of this version.

The original Venkatesvara Press edition (1884) of Bhartṛhari follows our W for *nīti* and *śṛṅgāra* but some Northern source for the *vairāgya*. The recent edition (dated 1932 but apparently issued only in 1944) from the same press is even more ruggedly eclectic, borrowing from the Ramacandra Budhendra version wherever possible. The Gujerati Printing Press edition now current follows Telang in *nīti*, and unspecified sources in the others, but gives extra stanzas from a MS of our version A. The unfortunate results of this procedure are only too obvious, apart from the question of actual readings, for the first Venkatesvara edition omitted *cūḍottaṃsita* . . ., while this is relegated to the extras by the Gujerati PP edition; Carey's had omitted *dikkālady anavacchinnān*, again from the same cause, following different MSS for different *śatakas*.

It will be seen from this that comparison of printed editions will lead to nothing, with the possible exception of editions printed before 1890 in out-of-the-way places. These may be traced in the India Office and the British Museum Catalogues, the former of which helps a great deal by specifying the press. But writing to the presses has yielded nothing, for about a third of those presses are defunct while the rest may be equally divided into two classes one of which regrets that no copy of the work in question is available even for purposes of comparison, while the rest deny ever having published any edition of Bhartṛhari! However, the end of World War II has made it possible to borrow some of these printed editions from abroad; I hope to make use of them in my critical edition of Bhartṛhari's poetry. If any reader can make the loan of any early printed edition of Bhartṛhari's *śatakas*, or still better send any MSS of type different from those utilized in my charts, I should be very grateful.

The only useful type of printed edition is one that follows a local MS version faithfully, and I know of only one such edition that has achieved popularity. This is the grandiose Ramacandra Budhendra version, printed very often in the South in both the original Telugu as well as Grantha editions, copied by the two Kanarese editions known to me, namely Dodbele Narayanasastri's and Magadi Krisnasastri's (both at Bangalore), and made generally available in *devanāgarī* by the Nirnaysagar Press of Bombay in a succession of editions of which the seventh is now current.

That the *Śatakatrayī* must be regarded as a whole is quite obvious.

2. My own charts given here are based upon the study of over 150 MSS, of which 76 are in Poona, and the rest were borrowed from all over the country. Not all of these represent the complete *Śatakatrayī*, but almost all of them can be assigned to one or the other of the versions given here or derived as misch-codices from them. Actually, more than 70 MSS of the complete *Śatakatrayī* have been charted, and one may be reasonably certain that the eight versions given here represent real fixed stages in the development of the literary tradition associated with the name of Bhartṛhari. There are unquestionably some more versions extant, but they have not yet been established with the same degree of certainty as those given in my appended chart. In particular, Bhandarkar Oriental Research Institute (BORI) MS No. 329 (all BORI numbers refer to the Kāvya Catalogue, vol. XIII) and Punjab University Library 2101

have so many omissions in common, especially in the *vairāgyaśataka*, that they must go back to a common prototype. Unfortunately, both these MSS are rather corrupt, with every evidence of a desperate attempt on the part of the scribes to include every stanza that could possibly be ascribed to Bhartṛhari, so that it has hitherto proved impossible to constitute the prototype itself with reasonable certainty. Rajapur MS No. 3 gives another version whose characteristic is a short or deficient *śṛṅgāra* of 91 stanzas, and this portion (though not the *śatakatrayī* version as a whole) is confirmed by the Bhārata Itihāsa Saṃśodhaka Maṇḍaḷa (ISM) collection, which contains just the *śṛṅgāra* (with a couple of additions) in Candracūḍa donation No. 603. Further, there is at least one version with a long *vairāgya*, represented by the Scindia O.R. Institute's (Ujjain) No. 1838, which has a *vairāgya* extending to no less than 153 stanzas. This was copied in Poona in 1814, from an exemplar which was unquestionably lacunary hence much older, and is unexpectedly confirmed in the characteristic portion (though not as a whole) by two fragments. The first is BORI 328, which is the oldest dated MS in India, of AD 1560, and uses *pṛṣṭhamātrās* consistently. This contained, to calculate from what is left, a *nīti* of about 100 and a *śṛṅgāra* of which the final *ślokas* ending at 103 are preserved; but the *vairāgya* the whole of which is preserved extends to 163 in the official numbering and 178 stanzas by actual count. Some of these stanzas are not found anywhere else except in Ujjain 1838, though the numbering is not an exact parallel for all the stanzas. This defect was remedied by another fragment in the possession of Mr B.D. Apte, acting manager of the Ānandāśrama, which contains the last hundred stanzas of the *vairāgya* and is an exact confirmation for these but with two *ślokas* added just before the final stanza. Further, a single folio belonging to an anthology and found in ISM Gore 144 ends the *vairāgyaśataka* at stanza 194, and this was to a considerable extent supported by the Gujerat Vernacular Society's MS No. 2387 which is the only other Bhartṛhari MS to give some of the stanzas found on the stray ISM folio. It will be seen that my chart of versions cannot be regarded as complete. For the present, I have kept the letters C and D for the types represented by Rajapur 3 and Ujjain 1838 respectively, with the hope that more evidence will be forthcoming before the publication of a critical edition.

3. For a collection of supposedly 300 stanzas, the difference between version, archetype, and recension might seem negligible. The actual MS evidence shows, however, such enormous variation that these differences are necessarily heightened. By a version, I mean here one particular arrangement of the stanzas confirmed by two or more MSS, preferably

with wide separation in time and space. These versions may be regarded as the frame of reference, a co-ordinate system as it were, for the location of any observed type of MS that cannot immediately be assigned to one of them. To borrow a simile from engineering practice, they form the reinforcement about which the amorphous substance of a collection of Bhartṛhari stanzas has generally been poured. These versions are naturally grouped into four archetypes, and the archetypes themselves fall into two quite obviously separate groups, the northern and the southern recensions. It might be added that the actual variants observed in the process of collation show in general that this type of classification is justified; MSS which have their stanzas in the same order tend also to have the same readings, the only further point to be noted here being that a MS differs from its version by influence of another version, when it is copied in the territory which is covered by the second version. It might be considered that some of these versions were constructed by their commentators from material available to them, and are therefore of comparatively recent origin. Without saying anything about the actual date of origin of any version, one may at least absolve the commentators of guilt in the formation of the versions as such, for every commentator I have studied gives variants as such (*pāṭhāntaras*) and even worse, comments upon readings which do not exist in the text, without noticing the oversight.

For editorial purposes, a version is naturally far more reliable than an unsupported MS, not only in the way of determined readings but actually as regards inclusion of stanzas. For example, our E_1 omits *mṛgamīnasajjanānāṁ*, and W_3 = BORI 336 drops out *veśyāsau madanajvālā*, while A_3 has passed over *yāvat svastham idaṁ*; in each case the omission causes a disturbance in numbering, and the stanza is clearly to be included in the version in question. On the other hand, it does not necessarily follow that having several MSS of a given version means that one can determine the version with greater ease or accuracy. For, in the first place occasional transpositions as may come from the scribe's having reversed a folio are common, particularly when a commented MS is being followed. Secondly, and this is of the utmost importance for anyone who uses my chart, there is hardly a MS which does not make slips in numbering, for the numbers were often added later on in a different pigment, and further confusion is inevitable when the commentary runs on continuously with the text. It does not suffice, as is invariably done by those who catalogue our MSS, to give the final number, because this may not coincide with the actual count; in one case at least the MS is over a hundred stanzas out as compared to its description, because after the hundredth, the top figure is generally left out by scribes and the cataloguer ignored this practice. Finally, for Bhartṛhari MSS at least, it is very important to note the actual number as well as the number written in the MS, for often they coincide with two different versions of the same recension. Occasionally, as with MS 159 of the collection made available to me by courtesy of Prof. S. V. Puntambekar of the Benares Hindu University, we find a second set of numbers in minuscule and even different colour above the first, which shows how MSS of different versions were being constantly compared. Additions are then indicated on the margin, which would be copied out by the next scribe into the text with the numbering done consecutively; but a few folios after, the scribe would generally lapse into copying the system of numbers before him, and betray the addition.

There is, in general, no special place for interpolation *because* the *śatakas* have not a special order dictated by logic, or by inner connection, even in the more logically arranged southern recension. The commonest additions are at the end of the *śataka*, but even here some effort is made to keep the final stanza the same, so that one cannot rigidly apply the principle of suspecting *ślokas* with large numbers. Occasionally, two stanzas with much the same content manage to come together, and I believe this may have happened because the transmission of the *ślokas* in question was mostly by memory. It must be remembered that almost every person with some claim to learning used these *ślokas* as tags in conversation, whence such confusion would be the natural result. For example, *bhūḥ paryaṅko* is a paraphrase in *mandākrāntā* metre of *mahāśayyā pṛthvī*, and I am inclined to think that it is an interpolation from the *śāntiśataka* (ascribed to Śilhaṇa). The verses *cumbanto gaṇḍabhittīr* and *keśān ākulayan* are palpable equivalents, generally juxtaposed in our MSS; *sudhāśubhraṃ dhāma* and *srajo hṛdyāmodā* have still more in common. Although many of these pairs survive, it has been possible to go beyond the published chart, by using other MS evidence, in throwing doubt on the authenticity of at least one member. The chart itself shows that the first of the equivalent pair *apasara sakhe dūrād* and *vyādīrghena calena* is to be suspected. On the other hand, one wonders whether the process has not occasionally worked in the opposite direction. One of the two stanzas with the same beginning *mattebhakumbhadalane* and *mattebhakumbhapariṇāhini* occurs in every version, but both occur in so few MSS that there is no option in view of the absence of any external evidence but to doubt the originality of both. These are, in any case, matters to be discussed in full detail by any critical editor, so we may pass them by with this brief indication.

4. Before coming to the MSS which determine the versions charted, it is necessary to note that their geographical distribution is by itself remarkable. The local versions of Bhartṛhari are found only in a region opening southwards from Rajputana, broadening into Gujerat and including the whole of the Indian peninsula. There are, in the strongest contradistinction to MSS of, say, the Mahābhārata, or the Pañcatantra, no local versions in Kasmir, Punjab, U.P., Mithila, Bengal, or Nepal. That is, Bhartṛhari has not spread into regions which (or the ways to which) were occupied at an early stage by Mohammedan conquest. To my mind this fact, which I shall establish in greater detail elsewhere, shows late growth of the popularity of Bhartṛhari, being a confirmation of the general note of frustration, neglect, despair, and poverty that sounds so clearly through the verses themselves and which furnishes in fact the principal factor common to all the versions of Bhartṛhari—the class-literature of the Hindu lower middle class in India. As for the date of Bhartṛhari, the MSS help very little for the oldest dated MS is the India Office 2539-*e* used by von Bohlen, dated AD 1547, and which from the calligraphy (seen by me only in rotograph) may not actually be so old for the possible substitution of 'śaka' for 'saṃvat' would not seem unreasonable in this case. There is no reason to believe any of the MSS now available to be older than the sixteenth century, and the majority are much later, which forms a striking tribute to the 'popularity' of Bhartṛhari in recent times, whatever his contemporary neglect. Copies must very clearly have been in enormous demand for use as texts, when we see that the more salacious *Amaruśataka* is available in exemplars three centuries older. From the surprising places in which Bhartṛhari MSS have turned up, I estimate their total number in the world as 3,000 or more. Most of these will not be accessible for study, unless they reach some public collection; the action of time, air, rain, white ants, and all other vermin except scholars will surely destroy the greater number that still survive the neglect and laziness of their possessors. Where a local version exists, Bhartṛhari MSS are about the commonest secular finds, just as the *Bhagavad Gītā* is the most likely religious find; MSS of both are being rapidly destroyed by the availability of cheap printed editions. But all this does not enable us to date Bhartṛhari himself with any certainty. It may be pointed out that the three stanzas that might possibly be used to date the writer all drop out of one version each: *eko rāgiṣu rājate*, which mentions the hermaphrodite Śiva; *diśa vanahariṇībhyo*, where we have a reference to the

highly prized pale golden complexion of *śaka* maidens (corrupted to *śukayuvati* in all MSS except B of the northern recension); and the ten *avatāras* of Viṣṇu in *brahmā yena kulālavan niyamito*. W omits the first two, X the last.

5. The actual versions have been constituted on the basis of the following sources:

NORTHERN RECENSION

Archetype α

Version **A**: A_1 = BBRAS 205–3 (Bhau Daji collection) with a Rajasthani commentary. A_2 = RASB G. 7779; A_3 = Jodhpur Archaeological Department collection, MS No. 2. For further confirmation, BBRAS 108 was available. The version may be assigned to the northern half of Rajasthan.

Version **B**: Baroda Gaekwar O. Inst. 11725, confirmed for the *śṛṅgāra* by Gujerat Vernacular Society (Ahmedabad) MS No. 1049, and in general (though not in full detail) by five other MS from Rajputana. This may be assigned tentatively to central Rajasthan; though the order is often nearer to our version J, this has been influenced by A as well as E.

Versions **C** and **D** are not yet well determined.

Version **E**: The Dhanasāra (commentator) version, one of the commonest Northern types, but spread by Jain influence over too large a territory to locate definitely, beyond assigning it to Rajasthan, probably the southern portion. Readings are influenced by the actual provenance. E_1 = BORI 332, E_2 = Baroda 787, E_3 = Baroda 1780, E_4 = BORI 333, E_5 = Rajapur 2. These may be traced actually to two variant forms, with a disturbance in the *śṛṅgāra* of the minor due to confusion between *tāvan mahattvaṃ* and *tāvad evāmṛtamayī*; this aberrant form also tends to add extra stanzas after the colophon of the *vairāgya*. Minor transpositions as well as heavy additions at the end are to be seen in many exemplars.

Version **F**: This is a pseudo-version which has been used for collation but not given on our chart. Its unity derives from the fact that it originates in the north and has definitely southern influence, probably from Maharastrian copyists or transmission. To this belong Tanjore Sarasvati Mahal 4905, 4907, 4902, India Office 2539-*e*, ISM Gorhe 305, numbered $F_{1\text{-}5}$ consecutively. The general origin is central India, though only F_5 has a colophon showing that it was written on the banks of the Godavari.

Archetype β

Version **H**: Commentator Rāmarṣi. This has been published by me in collaboration with K.V. Kṛṣṇamurti Sarma as No. 127 of the Ānandāśrama Sanskrit Series (1945). Only two commented MSS are known, of which the one in the British Museum (Bendall 255) is not at present accessible. H_1 = BORI 335; H_2 = BORI 327. Both of these come from Gujerat, being Telang's R and P respectively. Nevertheless, the version probably belongs to southern Rajasthan. H_2 contains (as *śṛṅgāra* 74) a stanza *pañcānanaṃ paribhava* which is unsupported and hence unreported here.

Version **J**: This is remarkable as the only northern version in any southern script, all known MSS being in Kanarese. J_1 is an ancient palm-leaf MS, obviously copied from a still older lacunary exemplar, made available by courtesy of Mr M. P. Wali, chairman of the district local board, Belgaum, from a Lingayat matha of the district. As this contains some stanzas only as traces in the Kanarese commentary, I have generally followed the order in J_2, which is a composite source made up for *nīti* of the Madras Government MS DC 12090 from Tirupati, and Mysore Oriental Library 1768 for the other two *śatakas*. Omission in J_1 are starred, while inclusions in J_1 omitted in J_2 are given in square brackets. Where the stanza belongs to different *śatakas* in the two, the J_2 number is given italicized.

SOUTHERN RECENSION

Archetype γ

Version **W**: This is the western Indian version, spread all over India by the great influence of Maharashtrian pundits in the last four centuries, a centre of infiltration being Benares. The lithographed editions are based upon this for the greater part, as also Carey's, Haeberlin's, and to some extent Bohlen's, for Bengal had no local versions. The great majority of MSS found in Maharashtra or with Maharashtrian pundits elsewhere belong to this type; though the text itself is generally corrupt, and the perfunctory, anonymous (though assigned by Rajendralal Mitra to Maheśvara) commentary useless, the order of ślokas here is quite well determined. The feature of this version is the deficient *vairāgya* of 86 (properly 85) stanzas, which has been brought to 100 or so in various ways in a minority of inflated MSS, often by additions which are repetitions of previous stanzas. None of these inflated MSS have been considered.

Archetype δ

Version **X**: Translator Tukā Brahmānanda, a goldsmith of Satara, of the seventeenth century. Determined from Rajapur 1, ISM Barve 244, ISM Rajavade 51, and others. British Museum Bendall 256-A is also an exemplar of this. This version with the next is under publication in the Bharatiya Vidya series at Bombay, to which the reader is referred for details and text of the whole archetype.

Version **Y**: This is the only verson found in almost all major scripts, and in localities spread over the whole of Bhartṛhari territory, from Benares to Travancore. Among the six available devanāgarī sources may be mentioned Y_1, the version (strongly influenced by X) with Maheśvara Bhaṭṭa's commentary. Of three Telugu, T_1 is the Ramacandra Budhendra version. Of the five Grantha MSS utilized, two from Mysore contain an anonymous Sanskrit commentary which is under publication in the Bharatiya Vidya series edition, but all Grantha MSS show strong Malayalam connections. Five Malayalam MSS collated at Trivandrum were utilized. Version Y, including the Telugu, Grantha, Malayalam groups, shows many small divergences, the best marked aberrant types being the Ramacandra Budhendra version and one determined by the last two Malayalam sources. Omissions in special sub-versions are starred, two inclusions of importance given in square brackets, lesser inclusions ignored.

6. The principal feature of the southern recension is an attempt at logical arrangement of the stanzas, which division into *paddhatis* is carried to extremes in archetype δ, where the *nīti* and *vairāgya* are rigidly divided into decades while the *śṛṅgāra* is partitioned into scores. This framework has the advantage that interpolations are limited, but additions have also been made for this archetype, generally at the end of the *paddhati*. It is fairly clear even from a study of the evidence for the Southern recension alone that the original number of stanzas could hardly have been 300, and that even different sub-types of δ try to make up the deficiency in different ways. Much the same conclusion can be reached by a close study of variation among the Northern versions and comparison of the two which shows a certain number of stanzas assigned to different *śatakas* in the two recensions leaves little doubt that the original number must have been well below three full centuries. This is further substantiated by the fact that there are not, in the North, three *maṅgalācaraṇa* stanzas; finer criticism results, in fact, in the exclusion even of *dikkālady anavacchinnān* (which probably enters with a Vedantic recension), so

that there is in effect just one benedictory stanza *cūḍottaṃsita* for the entire collection! Nothing except the constant attempt to collect all known or imagined Bhartṛhari stanzas could account for the variation, which has resulted even for the eight versions here represented in less than 221 common *ślokas* with a grand total of 397 stanzas, which is increased to about 700 by the inclusion of extras in all MSS and anthologies. This does not include two palpable forgeries, the *Viṭavṛtta* and the *Vijñānaśataka*. The best explanation of this phenomenon would be that the work is a collection of stanzas by later scholars of verses attributed by them to Bhartṛhari; as it were, a Bhartṛhari anthology. That a single author could have promulgated a work in a definite *śatakatrayī* form and that such liberties could have been taken with that form by later editors is hard to believe.

The interrelationship between MSS is a good deal more complicated than that shown by simple division into two recensions. The actual readings sometimes show strange coincidences, even in scribe's errors. That Malayalam MSS should on occasion give purely northern readings is expected from Sukthankar's pioneer work on the Mahābhārata, from the conservatism of Malayalam MSS and from the fact that Bhartṛhari was in all probability a northerner. That **J** should show southern readings is also natural, as it would be strongly influenced by **Y** MSS while retaining the northern order. But curiously enough, even **H** shows some southern readings against all other northern MSS while on occasion the only version of Southern type to agree with extreme northern readings is **W**. The riddle is to be solved by consideration of a single pair of ślokas: *asārāh sant yete* and *bhavanto vedānta*, which always occur consecutively in that order where both are found, namely in archetypes α and γ (with *bimbākaraṃ sudhādhāraṃ* obviously interpolated between the two in version **B**). In the other two archetypes, however, we get a very curious combination stanza with the first half of the first of these ending with the last half of the second. When we note that the second half of each of the two stanzas begins with *tathāpy*, this is clearly explained as a case of haplography in a single defective exemplar, hence must be assigned to very remote times when there existed very few copies of Bhartṛhari's work which no one took the trouble to read or even to compare with others. The total evidence, therefore, may be presented in the following *stemma codicum*.

Here I give the actual charts of the eight versions described. The final *śloka* of each *śataka* and version is given in bold-face type. N = *nīti*, S = *śṛṅgāra*, V = *vairāgya*; the *pratīkas* follow southern readings in general, as these are the more familiar from printed editions, but different possible beginnings are starred. The most noteworthy of these different beginnings is, perhaps, for *sā ramyā nagarī*, which begins *bhrātaḥ kaṣṭam aho* in the northern MSS.

Chart for Bhartṛhari Versions

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
akaruṇatvam akāraṇa	N. 75	N. 76	N. 75	N. 73	N. 70	N. 52	N. 41	N. 41
agre gītaṃ sarasa	V. 63	V. 55	V. 63	V. 58	V. 53	V. 64	V. 65	V. 66
acchāccha candana	S. 33	S. 35	S. 38	S. 34	X. 33	S. 38	S. 86	S. 87
ajānan māhātmyaṃ	V. 22	V. 20	V. 22	V. 22	V. 20	V. 17	V. 7	V. 18
ajñaḥ sukhamārādhyaḥ	N. 2	N. 2	N. 2	N. 2	N. 3	N. 3	N. 3	N. 3
atikrāntaḥ kālo	V. 33	...	V. 33	...	...	...	...	...
adarśane darśana	S. 62	S. 62	S. 65	S. 61	S. 59	S. 23	S. 23	S. 22
adyāpi no 'jjhati	N. 101	...	...	...	...	...	...	...
adhigataparamārthān	N. 13	N. 12	N. 12	N. 12	N. 11	N. 17	N. 13	N. 13
anāghrātaṃ puṣpaṃ	S. 18	...	S. 20	...	...	...	...	...
anāvartī kālo	V. 36	...	V. 36	V. 34	...	...	...	...
apasara sakhe dūrād	S. 73	S. 79	S. 82	S. 78	S. 76	S. 83	...	S. 52
apriyavacanadaridraiḥ	N. 82	N. 83	...	N. 80	N. 78	N. 105	...	...
abhimatamahāmāna	V. 100	V. 93	...	V. 97	V. 93	V. 20	V. 12	V. 22
abhimukhanihatasya	N. 103	Np. 105	N. 102	N. 101	N. 97	...	...	...
abhuktāyāṃ yasyāṃ	V. 26	V. 23	V. 26	V. 25	V. 25	V. 58	V. 57	V. 58
amīṣāṃ prāṇānāṃ	V. 39	V. 32	V. 38	V. 35	V. 32	V. 7	V. 5	V. 5
ambhojinīvanavihāra	N. 42	N. 41	N. 43	N. 42	N. 33	N. 18	N. 14	N. 14
ayam amṛtanidhānaṃ	...	...	...	...	...	...	N. 88	[N. 88]
arthānāmīśise tvaṃ	V. 31	V. 27	V. 31	V. 30	V. 28	V. 52	V. 51	V. 52

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
ardhaṃ suptvā niśā	S. 95	S. 95	S. 98	S. 94	S. 92	S. 47	S. 94	S. 96
avaśyaṃ yātāraś cira	V. 17	V. 16	V. 17	V. 17	V. 16	V. 12	V. 35	V. 12
asīmahi vayaṃ bhikṣām	. . .	V. 103	. . .	V. 29	. . .	V. 55	V. 54	V. 55
asārāḥ santvete	S. 11	S. 14	S. 14	S. 14	S. 14	S. 51	S. 36	S. 35
asitātmā susambaddhaḥ	S. 77	S. 73	S. 76	S. 71	S. 70	. . .	. . .	. . .
asūcīsaṃcāre tamasi	S. 88	S. 87	S. 90	S. 86	S. 84	S. 45	S. 92	S. 94
ahir iva janayogaṃ	. . .	. . .	. . .	. . .	. . .	. . .	V.69	. . .
ahau vā hāre vā	V. 89	V. 106	. . .	V. 83	V. 100	V. 49	. . .	. . .
ākrāntaṃ maraṇena	V. 96	V. 89	V. 106	V. 93	V. 89	V. 29	V. 22	V. 32
āghrāya pustakaṃ	V. 104	. . .	. . .	. . .	. . .	. . .	. . .	. . .
ājñā kīrtiḥ pālanaṃ	N. 88	N. 89	N. 88	N. 86	N. 84	N. 48	N. 39	N. 39
ādityasya gatāgatair	V. 8	V. 7	V. 8	V. 8	V. 7	V. 40	V. 42	V. 43
ādhivyādhiśatair	V. 97	V. 90	V. 107	V. 94	V. 90*	V. 30	V. 23	V. 33
āmīlitanayanānāṃ yaḥ	S. 65	S. 65	S. 68	. . .	S. 62	S. 27	S. 27	S. 26
āyuḥ kallolalolaṃ	V. 81	V. 72	V. 84	V. 73	V. 72	V. 33	V. 26	V. 36
āyurvarṣaśataṃ nṛṇāṃ	V. 99	V. 92	V. 109	V. 96	V. 92	V. 46	V. 48	V. 49
ārambhagurvī kṣayiṇī	N. 77	N. 78	N. 77	N. 75	N. 73	N. 60	N. 49	N. 49
ālasyaṃ hi manuṣyā	N. 62	N. 59	N. 61	N. 60	N. 58	N. 86	. . .	. . .
āvartaḥ saṃśayānāṃ	N. 51 S. 29	S. 29	S. 31	S. 28	S. 27	S. 76	S. 46	S. 45
āvāsaḥ kilakiñcid	S. 87	S. 84	S. 87	S. 83	S. 81	S. 35	S. 82	S. 83

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
āvāsaḥ kriyatāṃ gāṅge	S. 82	S. 86	S. 89	S. 85	S. 83	S. 31	S. 39	S. 38
āśā nāma nadī mano	V. 48	V. 40	V. 47	V. 43	V. 40	V. 11	V. 34	V. 10
asaṃsārāt tribhuvana	V. 51	V. 41	V. 48	V. 44	V. 77	V. 82	V. 81	
āsāreṇa na harmyataḥ	S. 94	S. 94	S. 97	S. 93	S. 91	S. 46	S. 93	S. 95
itaḥ svapiti keṣavaḥ	N. 17	N. 16	N. 16	N. 16	N. 15	N. 76	N. 66	N. 67
ito viduydvallīvila	S. 85	S. 82	S. 85	S. 81	S. 79	S. 44	S. 91	S. 93
idaṁ anucitam akrama	S. 70	S. 76	S. 79	S. 74	S. 73	S. 28	S. 28	S. 27
ime tāruṇyaśrīnava	S. 86	S. 83	S. 86	S. 82	S. 80	. . .	S. 18	S. 19
iyatyetasmin vā	. . .	N. 65	. . .	. . .	. . .	. . .	. . .	. . .
iyam bālā māṃ pratya	S. 16	S. 23	V. 69	. . .	V. 58	S. 94	S. 63	S. 63
iha hi madhuragītaṃ	S. 37	S. 38	S. 41	S. 37	S. 36	S. 87	S. 56	S. 56
uḍugaṇaparivāro	. . .	. . .	. . .	. . .	. . .	. . .	N. 89	. . .
utkhātaṃ nidhiśaṅka	V. 5	V. 5	V. 5	V. 5	V. 5	V. 5	V. 3	V. 3
udanvac channā bhūḥ	. . .	N. 17	N. 17	N. 17	. . .	. . .	. . .	. . .
uḍbhāṣitākhilakhala	N. 91	N. 92	N. 90	N. 89	N. 87	N. 59	N. 48	N. 48
dhik tasya mandamana	S. 58	. . .	. . .	S. 57	. . .	. . .	. . .	. . .
na kaścid caṇḍakopā	N. 73	N. 74	N. 73	N. 71	N. 69	N. 57	N. 46	N. 46
na gamyo mantrāṇāṃ	S. 68	S. 68	S. 71	S. 66	S. 65	S. 88	S. 57	S. 57
na dhyātaṃ padam	V. 12	V. 11	V. 12	V. 12	V. 11	V. 42	V. 44	V. 45

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
na naṭā na viṭā na	N. 28	V. 25	V. 28	V. 27	V. 26	V. 56	V. 55	V. 56
na nirmitā kena ca	N. 60	. . .	. . .	. . .	. . .	. . .	. . .	. . .
na bhikṣā duḥprāpā	V. 37	V. 104	. . .	. . .	. . .	. . .		
namasyāmo devān nanu	N. 20	N. 20	N. 20	N. 20	N. 17	N. 94	N.93	N. 91
namratvenonnamantaḥ	N. 40	N. 48	N. 41	N. 40	N. 37	N. 69	N. 59	N. 60
na saṃsārotpannaṃ	V. 3	V. 3	V. 3	V. 3	V. 3	V. 3	. . .	V. 11
nābhyastā bhuvi vādi	V. 85	V. 79	V. 91	V. 85	V. 79	V. 43	V. 45	V. 46
nāmṛtaṃ ne viṣaṃ kiṃ	S. 25	S. 25	S. 27	S. 24	S. 23	S. 75	S. 45	S. 44
nāyaṃ te samayo raha	. . .	. . .	V. 99	. . .	. . .	. . .	. . .	. . .
nindantu nītinipuṇāḥ	N. 9	N. 10	N. 10	N. 10	N. 9	N. 83	. . .	N. 75*
nivṛttā bhogecchā	V. 10	V. 9	V. 10	V. 10	V. 9	V. 10	V. 33	V. 9
nīcā duḥkhe na yā	N. 11	. . .	. . .	. . .	. . .	. . .	. . .	. . .
nūnaṃ hi te kavivarā	S. 56	S. 57	S. 61	S. 55	S. 54	S. 10	S. 10	S. 10
nūnam ājñākaras tas	S. 69	S. 69	S. 72	S. 67	S. 66	S. 11	S. 11	S. 11
netā yasya bṛhaspatiḥ	N. 59	N. 57	N. 59	N. 58	N. 56	N. 88	N. 81	N. 81
naivākṛtiḥ phalati	N. 44	N. 43	N. 45	N. 44	N. 40	N. 96	N. 98	N. 97
no cintāmanayo na	V. 103	. . .	. . .	. . .	. . .	. . .	. . .	. . .
no satyena mṛgāṅka	S. 43	S. 30	S. 32	S. 29	S. 28	S. 77	S. 47	S. 46
patraṃ naiva yadā	. . .	. . .	. . .	. . .	. . .	N. 93	. . .	. . .
padmākaraṃ dinakaro	N. 83	N. 84	N. 81	N. 81	N. 79	N. 73	N. 63	N. 63

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
paradāraparadravya	. . .	. . .	. . .	. . .	. . .	. . .	N. 60	. . .
parikṣīṇaḥ kaścit	N. 6	N. 7	N. 7	N. 7	N. 6	N. 45	N. 36	N. 36
paricaritavyaḥ santo	. . .	N. 101	. . .	. . .	. . .	. . .	. . .	. . .
paribhramasi kiṃ	. . .	. . .	. . .	. . .	. . .	V. 60	V. 61	V. 62
parimalabhṛto vātāḥ	S. 34	S. 34	S. 37	S. 33	S. 32	S. 33	S. 80	S. 81
parivartini saṃsāre	N. 96	N. 98	N. 96	N. 96	N. 93	N. 32	N. 23	N. 24
pareṣāṃ cetāṃsi	V. 35	V. 31	V. 35	V. 33	V. 31	V. 59	V. 60	V. 61
pāṇiṃ pātrayatāṃ	. . .	. . .	. . .	. . .	. . .	V. 51	V. 90	V. 90
pāṇiḥ pātraṃ pavitraṃ	V. 54	V. 47	V. 54	V. 50	. . .	. . .	V. 99	V. 99
pātālam āviśasi yāsi	V. 76	V. 67	V. 79	V. 82	V. 67	V. 68	V. 71	V. 70
pātitopi karāghātair	N. 25	N. 25	N. 25	N. 26	N. 21	N. 85	. . .	. . .
pānthastrī virahāna	S. 84	S. 81	S. 84	S. 80	S. 78*	S. 36	S. 83	S. 84
pāpān nivārayati yo	N. 33	N. 34	N. 35	N. 37	N. 30	N. 72	N. 64	N. 65
puṇye grāme vane vā	V. 58	V. 50	V. 57	V. 53	V. 48	V. 21	V. 13	V. 23
puṇyair mūlaphalais	V. 61	V. 53	V. 61	V. 56	V. 51	V. 24	V. 16	V. 26
purā vidvattāsīd upa	V. 30	. . .	V. 29	. . .	. . .	. . .	. . .	. . .
praṇayamadhurāḥ pre-	S. 53	S. 54	S. 58	S. 52	S. 51	S. 30	S. 19	S. 20*
*prathitaḥ praṇayava	S. 90	S. 89	S. 92	S. 88	S. 86*	S. 32	S. 84	S. 85
pradānaṃ pracchannaṃ	N. 78	N. 79	N. 78	N. 76	N. 74	N. 64	. . .	N. 57
prasahya maṇim uddha	N. 3	N. 3	N. 3	N. 3	[N. 3]	N. 4	N. 4	N. 4
prāṅ māmeti manāganā	S. 66	S. 66	S. 69	S. 64	S. 63	S. 25	S. 25	S. 24
prāṇāghātān nivṛttiḥ	V. 64	V. 57	V. 65	V. 60	V. 55	N. 26	N. 54	N. 54

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
prāptāḥ śriyaḥ sakala	V. 73	V. 64	V. 75	V. 67	V. 64	V. 65	V. 66	V. 67
prārabhyate na khalu	. . .	. . .	. . .	. . .	. . .	N. 27	N. 72	N. 72
priyasakhavipaddaṇḍā	V. 91	V. 83	V. 100	. . .	V. 84	. . .	N. 90	N. 88*
priyā nyāyyā vṛttir	N. 15	N. 14	N. 14	N. 14	N. 13	N. 28	N. 56	N. 56
praudyat prauḍhapri	S. 96	S. 96	S. 99	S. 95	S. 93	. . .	S. 96	S. 98
phalaṃ svecchālabhyaṃ	. . .	. . .	. . .	. . .	. . .	V. 25	V. 17	V. 27
phalam alam aśanāya	V. 23	V. 21	V. 23	V. 21	V. 21	V. 54	V. 52	V. 54
bāle bāle cakitahari	. . .	V. 59	. . .	. . .	. . .	. . .	. . .	. . .
bāle līlāmukulitam	S. 15	V. 105	S. 18 V. 68	. . .	V. 57	S. 93	S. 62	S. 62
bimbākāraṃ sudhādhā	. . .	S. 15	. . .	. . .	. . .	. . .	. . .	. . .
boddhāro matsaragras	V. 2	V. 2	V. 2	V. 2	V. 2	V. 2	N. 2	N. 2
brahmajñānavivekanir	. . .	V. 95	. . .	V. 98	V. 94	V. 13	V. 36	V. 13
brahmāṇḍaṃ maṇḍalī	. . .	V. 73	V. 85	V. 74	V. 73	. . .	V. 92	V. 92
brahmā yena kulāla	N. 36	N. 37	N. 38	N. 21	N. 34	N. 95	. . .	N. 92
brahmendrādimarud	. . .	. . .	. . .	. . .	. . .	V. 37	V. 30	V. 40
bhaktir bhave maraṇa	V. 74	V. 65	V. 76	V. 68	V. 65	V. 66	V. 70	V. 68
bhagnāśasya karaṇḍa	N. 24	N. 24	N. 24	N. 25	N. 20	N. 84	N. 82	N. 82
bhartṛhari bhūmipati	N. **105**	. . .	. . .	. . .	. . .	. . .	. . .	. . .
bhavanti namrās tara	N. 80	N. 81	N. 80	N. 78	N. 76	N. 70	N. 62	N. 61
bhavanto vedāntapra	S. 12	S. 16	S. 15	. . .	. . .	S. 52	. . .	. . .

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
*bhavyam bhuktaṃ	. . .	. . .	V. 77	V. 100	. . .	. . .	. . .	. . .
bhikṣāśanaṃ tadapi	V. 20	V. 18	V. 20	V. 19	V. 18	V. 15	V. 38	V. 15
bhikṣāśī janamadhya	. . .	V. 76	V. 88	V. 77	V. 76	. . .	V. 95	V. 95
bhikṣāhāram adainyam	. . .	. . .	. . .	. . .	. . .	V. 27	V. 20	V. 30
bhīmaṃ vanaṃ bhavati	N. 56	N. 53	N. 55	N. 54	N. 53	N. 102	N. 101	N. 100
bhūḥ paryaṅko nija	. . .	. . .	. . .	. . .	. . .	V. 86	. . .	. . .
bhogā na bhuktā vaya	V. 13	V. 12	V. 13	V. 13	V. 12	V. 8	V. 32	V. 7
bhogā bhaṅguravṛttayo	V. 94	V. 87	V. 104	V. 91	V. 87	V. 36	V. 29	V. 39
bhogā meghavitāna	V. 56	V. 49	V. 56	V. 52	V. 47	V. 32	V. 25	V. 35
bhogāstuṅgataraṅga	. . .	V. 96	. . .	V. 101	V. 96	V. 31	V. 24	V. 34
bhoge rogabhayaṃ	. . .	. . .	. . .	. . .	[V. 47]	V. 28	V. 21	V. 31
bho bho buddhivicāra	. . .	V. 100	. . .	. . .	. . .	. . .	. . .	. . .
bho martyāḥ śṛṇuta	V. 88	. . .	. . .	. . .	. . .	. . .	. . .	. . .
bhrāntaṃ deśam aneka	V. 4	V. 4	V. 4	V. 4	V. 4	V. 4	V. 2	V. 2
bhrūcāturyāt kuñcitā	S. 26	S. 26	S. 28	S. 25	S. 24	S. 3	S. 3	S. 3
majjatv ambhasi yātu	N. 57	N. 55	N. 57	N. 56	N. 54	N. 101	N. 99	N. 98
maṇiḥ śāṇollīḍhaḥ	N. 5	N. 6	N. 6	N. 6	N. 5	N. 44	N. 35	N.35
mattebhakumbhadalane	. . .	S. 7	S. 7	S. 7	S. 7	S. 58	S. 72	S. 73
mattebhakubmhapariṇā	S. 17	. . .	S. 19	S. 17	. . .	. . .	. . .	. . .
madhu tiṣṭhati vāci	. . .	. . .	. . .	. . .	. . .	S. 82	S. 51	S. 51
madhurayaṃ madhurair	S. 47	S. 48	S. 52	S. 46	S. 45	S. 34	S. 81	S. 82

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
manasi vacasi kāye	N. 16	N. 15	N. 15	N. 15	N. 14	N. 78	N. 69	N. 70
mahādevo devaḥ sarid	V. 46	. . .	V. 45	. . .	. . .	. . .	. . .	. . .
mahāśayyā pṛthvī	V. 78	V. 69	V. 81	V. 71	V. 69	V. 84	V. 94	V. 94
maheśvare vā jagatām	V. 92	V. 84	V. 101	V. 89	V. 85	V. 79	. . .	V. 84*
mātar medini tāta	. . .	V. 77	V. 89	V. 78	V. 77	. . .	V. 100	V. 100
mātar lakṣmi bhajasva	V. 65	V. 58	V. 66	V. 61	V. 56	. . .	V. 93	V. 93
mātsaryam utsārya	S. 13	S. 19	S. 16	S. 15	S. 15	S. 18	S. 37	S. 36
māne mlāyini khaṇḍi	V. 34	V. 30	V. 34	V. 32	V. 30	. . .	V. 79	V. 78
mālatīkusumasyeva	. . .	. . .	. . .	. . .	. . .	N. 104	. . .	. . .
mālatī śirasi jṛmbha	S. 54	S. 55	S. 59	S. 53	S. 52	S. 24	S. 24	S. 23
mukhena candrakāntena	S. 75	S. 70	S. 74	S. 69	S. 68	S. 20	S. 16	S. 16
mugdhe dhānuṣkatā	S. 78	S. 74	S. 77	S. 72	S. 71	S. 13	S. 14	S. 13
mṛgamīnasajjanānāṃ	N. 34	N. 35	N. 36	N. 32	N. 31	N. 61	N. 50	N. 50
mṛtpiṇḍo jalarekhayā	V. 27	V. 24	V. 27	V. 26	V. 24	. . .	V. 58	V. 59
mohaṃ mārjaya tām	V. 62	V. 54	V. 62	V. 57	V. 52	V. 62	V. 63	V. 64
maunān mūkaḥ pravaca	N. 39	N. 39	N. 40	N. 41	N. 36	N. 58	N. 47	N. 47
*yaḥ prīṇayet sucari	N. 27	N. 27	N. 27	N. 28	N. 23	N. 68	. . .	N. 59
*yato meruḥ śrīman	V. 71	V. 62	V. 73	V. 81	V. 62	. . .	V. 73	V. 72
yatrānekaḥ kvacid api	V. 42	V. 35	V. 41	V. 38	V. 35	V. 39	V. 41	V. 42
yathā kandukapātena	N. 26	N. 26	N. 26	N. 27	N. 22	. . .	N. 83	N. 83

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
yathāturaḥ pathyam	. . .	S. 42	S. 45	. . .	. . .	. . .	. . .	. . .
yadacetanopi pādaiḥ	N. 87	N. 88	N. 86	N. 85	N. 83	N. 37	N. 29	N. 29
yadā kiñcijñoham	V. 32	V. 29	V. 32	V. 31	V. 29	N. 8	N. 8	N. 8
yadā yogābhyāsa	S. 101	S. 5	S. 5	S. 5	S. 5	S. 96	S. 68	S. 68
yadāsīdajñānaṃ smara	V. 82	V. 74	V. 86	V. 75	S. 74	V. 98	V. 101	S. 69
yadi dhaninaḥ satpuru	. . .	N. 108	. . .	. . .	. . .	. . .	. . .	. . .
yadi nāma daivagatyā	. . .	N. 107	N. 104	N. 103	. . .	. . .	. . .	. . .
Yad etat pūrṇendu	S. 31	S. 32	S. 34	S. 31	S. 30	S. 79	S. 52	S. 48
yad etat svacchandaṃ	V. 53	V. 46	V. 53	V. 49	V. 46	. . .	V. 83	V. 82
yad dhātrā nijabhāla	N. 69	N. 68	N. 69	N. 67	N. 65	N. 49	N. 40	N. 40
yad yasyā nābhiruci	. . .	S. 101	S. 105	S. 101	S. 98	S. 100	. . .	. . .
yan nāgāmadavāri	. . .	N. 54	. . .	N. 55	. . .	. . .	. . .	. . .
yasmin jīvati jīvanti	. . .	. . .	. . .	. . .	. . .	. . .	N. 24	. . .
yasyāsti vittaṃ sa	N. 64	N. 62	N. 64	N. 62	N. 60	N. 41	N. 32	N. 32
yāṃ cintayāmi satataṃ	N. 1	N. 1	N. 1	V. 106	. . .	N. 2	. . .	. . .
yāvat svastham idam	V. 84	V. 78	V. 90	V. 79	V. 78	V. 72	V. 76	V. 75
yā sādhūṃśca khalān	N. 30	N. 31	N. 32	N. 34	N. 27	N. 98	N. 94	N. 93
yūnam anaṅgaṃ jayatāṃ	. . .	. . .	. . .	. . .	. . .	. . .	S. 21	. . .
yūyaṃ vayaṃ vayaṃ	V. 67	. . .	V. 67	V. 62	. . .	. . .	. . .	. . .
yenaivāmbarakhaṇḍena	V. 16	V. 15	V. 16	V. 16	V. 15	. . .	N. 87	N. 87*
ye vardhante dhana	V. 49	V. 42	V. 49	V. 45	V. 42	V. 26	V. 18	V. 28
yeṣāṃ na vidyā na	. . .	. . .	. . .	. . .	. . .	N. 13	. . .	. . .

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
ye santoṣanirantara	N. 19	N. 19	N. 19	N. 19	V. 83	. . .	V. 19	V. 29
raktatvaṃ kamalānāṃ	. . .	. . .	N. 29	. . .	. . .	. . .	. . .	. . .
ratnair mahābdhes	N. 65	N. 63	N. 65	N. 63	N. 61	N. 80	N. 71	N. 71
ramyaṃ harmyatalaṃ	V. 68	. . .	V. 70	V. 63	V. 59	V. 76	V. 81	V. 80
ramyāś candramarīca	V. 83	V. 75	V. 87	V. 76	V. 75	V. 75	V. 80	V. 79
rāgasyāgāram ekaṃ	S. 41	S. 43	S. 46	S. 41	S. 41	S. 70	S. 30	S. 29
rājate rājamānāyā	. . .	. . .	. . .	S. 99	. . .	. . .	. . .	. . .
rajan dudhukṣasi yadi	N. 71	N. 72	N. 71	N. 69	N. 67	N. 46	N. 37	N. 37
rājans tṛṣnāmburāṣer	S. 19	S. 18	S. 21	S. 18	S. 17	S. 69	S. 29	S. 28
rātriḥ saiva punaḥ	V. 77	V. 68	V. 80	V. 70	V. 68	V. 41	V. 43	V. 44
re re cātaka sāvadhā	. . .	. . .	. . .	. . .	. . .	N. 51	. . .	. . .
lajjāṃ gunaughajana	N. 97	N. 99	N. 97	N. 95	N. 95	N. 110	N. 74	N. 73*
labheta sikatāsu	. . .	N. 4	N. 4	N. 4	N. 3	N. 5	N. 5	N. 5
lāṅgulacālanam adhaś	N. 70	N. 71	N. 70	N. 68	N. 66	N. 31	N. 22	N. 23
līlāvatināṃ sahajā	S. 8	S. 11	S. 11	S. 11	S. 11	S. 78	S. 48	S. 47
lobhaś ced aguṇena	N. 41	N. 40	N. 42	N. 39	N. 38	N. 55	N. 43	N. 44
vaktraṃ candravikāsi	S. 24	S. 24	S. 26	S. 23	S. 22	S. 5	S. 5	S. 5
vacasi bhavati saṅga	S. 102	S. 6	S. 6	S. 6	S. 6	S. 56	S. 70	S. 71
vane raṇe śatrujalā	N. 55	N. 52	N. 56	N. 53	N. 52	N. 97	N. 100	N. 99
vayaṃ yebhyo jātāś	V. 41	V. 34	V. 40	V. 37	V. 34	V. 45	V. 47	V. 48

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
vayam iha parituṣṭā	V. 52	V. 45	V. 52	V. 48	V. 45	V. 53	V. 53	V. 53
varaṃ parvatadurgeṣu	. . .	N. 60	N. 62	. . .	. . .	N. 14	. . .	. . .
varaṃ prāṇocchedhaḥ	N. 58	N. 56	N. 58	N. 57	N. 55	N. 36	N. 28	N. 28
varaṃ śṛṅgotsaṅgād	N. 85	N. 86	N. 82	N. 83	N. 81	. . .	N. 77	N. 78
varnaṃ sitaṃ jhaṭiti	V. 105	. . .	. . .	. . .	N. 48	V. 71	V. 75	V. 74*
valibhir mukham	V. 15	V. 14	V. 15	V. 15	V. 14	V. 9	V. 31	V. 8
vahati bhuvanśreṇiṃ	N. 95	N. 96	N. 94	N. 93	N. 91	N. 35	N. 27	N. 27
vahnis tasya jalāyate	N. 86	N. 87	N. 85	N. 84	N. 82	N. 109	N. 79	N. 79
vāñchā sajjanasaṅgame	N. 49	N. 47	N. 49	N. 48	N. 44	N. 62	N. 51	N. 51
vitīrṇe sarvasve	. . .	V. 44	V. 51	V. 47	V. 44	V. 81	V. 86	V. 86
vidyā nādhigatā	V. 50	V. 43	V. 50	V. 46	V. 43	V. 44	V. 46	V. 47
vidyā nāma narasya	N. 92	N. 93	N. 91	N. 90	N. 88	N. 20	N. 16	N. 16
vipadi dhairyam athā	N. 8	N. 9	N. 9	N. 9	N. 8	N. 63	N. 52	N. 52
vipulahṛdayair Iśair	V. 24	V. 22	V. 24	V. 23	V. 22	V. 57	V. 56	V. 57
viyad upacita meghaṃ	S. 92	S. 92	S. 95	S. 91	S. 89	S. 42	S. 90	S. 91
viramata budhā yoṣit	. . .	V. 56	V. 64	V. 59	V. 54	. . .	S. 67	S. 67
virama virmāyāsād	N. 74	N. 75	N. 74	N. 72	N. 71	. . .	N. 91	N. 89*
virahopi saṅgamaḥ	S. 72	S. 78	S. 81	S. 76	S. 75	. . .	S. 65	S. 65
viruddhas tathyo vā	N. 50	. . .	. . .	. . .	. . .	. . .	. . .	. . .
vivekavyākośe vikasa-	V. 18	. . .	V. 18	. . .	. . .	. . .	. . .	. . .
vīśramya viśramya	S. 61	S. 61	S. 64	S. 60	S. 58	S. 22	S. 22	S. 21
viśvāmitraparāśara	. . .	. . .	. . .	. . .	S. 12	S. 65	S. 79	S. 80

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
vistāritaṃ makara	S. 51	S. 52	S. 56	S. 50	S. 49	S. 84	S. 53	S. 53
veśyasau madanajvā	S. 46	S. 47	S. 50	S. 45	S. 44	S. 90	S. 59	S. 59
vairāgyaṃ saṃśrayaty	S. 104	S. 100	S. 104	S. 100	S. 97	S. 99	S. 100	
vyāghrīva tiṣṭhati	V. 101	V. 94	. . .	V. 99	V. 95	V. 35	V. 28	V. 38
vyādīrgheṇa calena	S. 71	S. 77	S. 80	S. 75	S. 74	S. 86	S. 55	S. 55
vyālaṃ bālamṛṇāla	N. 89	N. 90	N. 87	N. 87	N. 85	N. 6	N. 6	N. 6
śakyo vārayituṃ	. . .	. . .	. . .	. . .	. . .	N. 11	. . .	. . .
śambhusvayambhuharayo	S. 48	S. 50	S. 54	S. 48	S. 47	S. 1	S. 1	S. 1
śayyā śītaśilā gṛhaṃ	V. 90	V. 107	V. 96	. . .	. . .	. . .	. . .	. . .
śaśī divasadhūsaro	N. 4	N. 5	N. 5	N. 5	N. 4	N. 56	N. 45	N. 45
śāstrajñopi praguṇi	S. 35	S. 36	S. 39	S. 35	S. 34	S. 62	S. 76	S. 77
śāstropaskṛta śabda	N. 7	N. 8	N. 8	N. 8	N. 7	N. 15	N. 11	N. 11
śiraḥ śārvaṃ svargāt	V. 47	V. 39	V. 46	V. 42	V. 39	N. 10	N. 10	N. 10
śubhraṃ sadma savi	S. 2	S. 2	S. 2	S. 2	S. 2	S. 95	S. 95	N. 94
śṛṅgāradrumanīrade	S. 40	S. 41	S. 44	S. 40	S. 39	S. 71	S. 31	S. 30
śrotṛṃ śrutenaiva na	N. 67	N. 66	N. 67	N. 65	N. 63	N. 71	N. 61	N. 62
saṃsāra tava paryanta	S. 38	S. 39	S. 42	S. 38	S. 37	S. 68	S. 34	S. 33
saṃsare'sminnasāre ku	S. 32	S. 33	S. 35	S. 32	S. 31	S. 66	S. 32	S. 31
saṃsāre svapnasāre pa	S. 21	S. 21	S. 23	S. 20	S. 19	S. 19	S. 38	S. 37
*sakhe dhanyāḥ kecit	V. 59	. . .	V. 59	. . .	. . .	. . .	. . .	. . .
saṅgama viraha	. . .	. . .	. . .	S. 77	. . .	. . .	. . .	. . .

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
sa jātaḥ kopyāsīn	. . .	V. 26	V. 30	V. 28	V. 27	. . .	V. 59	V. 60
sati pradīpe satya	S. 74	S. 71	S. 73	S. 68	S. 67	S. 14	S. 13	S. 14
satyaṃ janā vacmi na	S. 7	S. 10	S. 10	S. 10	S. 10	S. 54	S. 41	S. 40
satyānṛtā ca paruṣā	N. 72	N. 73	N. 72	N. 70	N. 68	N. 47	N. 38	N. 38
satyāmeva trilokī	. . .	. . .	V. 97	. . .	. . .	. . .	. . .	. . .
santaptāyasi saṃsthi	N. 35	N. 36	N. 37	N. 33	N. 32	N. 67	N. 57	N. 58
santyanyepi bṛhaspati	N. 66	N. 64	N. 66	N. 64	N. 62	N. 34	N. 26	N. 26
santyevātra vane vane	. . .	. . .	. . .	. . .	. . .	. . .	N. 70	. . .
sanmārge tāvadāste	S. 30	S. 31	S. 33	S. 30	S. 29	S. 59	S. 73	S. 74
sa parapratārako' sau	S. 60	S. 60	S. 63	S. 59	S. 57	S. 57	S. 71	S. 72
samārambhā bhagnāḥ	. . .	. . .	. . .	V. 65	. . .	. . .	. . .	. . .
sampatsu mahatāṃ	. . .	N. 28	N. 28	N. 29	N. 25	N. 66	N. 55	N. 55
saṃmohayanti madayan	. . .	. . .	. . .	V. 105	. . .	S. 21	. . .	. . .
sarpaḥ krūraḥ khalaḥ	. . .	. . .	. . .	. . .	. . .	. . .	N. 44	. . .
sahakārakusumakesara	S. 91	S. 90	S. 93	S. 89	S. 87	S. 37	S. 85	S. 86
*sā ramyā nagarī mahān	V. 40	V. 33	V. 39	V. 36	V. 33	V. 38	V. 40	V. 41
sāhityasaṅgītakalā	. . .	. . .	. . .	. . .	. . .	N. 12	. . .	. . .
siṃhaḥ śiśur api nipa	N. 98	N. 100	N. 98	N. 97	N. 94	N. 38	N. 30	N. 30
siṃho balī dvirada	. . .	. . .	. . .	V. 107*	. . .	. . .	. . .	. . .
siddhādhyāsitakandaro	S. 9	S. 12	S. 12	S. 12	. . .	S. 67	S. 33	S. 32
sujanaṃ vyajanaṃ manye	. . .	. . .	. . .	. . .	. . .	. . .	N. 58	. . .
sutārā vikrītā	N. 37	. . .	. . .	. . .	. . .	. . .	. . .	. . .

Chart (*Contd.*)

	Northern Recension					Southern Recension		
	α			β		γ	δ	
Stanza	A	B	E	H	J	W	X	Y
sudhāmayopi kṣayaroga	. . .	. . .	S. 36	. . .	. . .	. . .	. . .	. . .
sudhāśubhraṃ dhāma	S. 80	S. 85	S. 88	S. 84	S. 82	S. 40	S. 88	S. 89
sūnuḥ saccaritaḥ satī	. . .	. . .	. . .	. . .	. . .	N. 25	. . .	
sṛjati tāvad aśeṣa	V. 102	V. 97	. . .	V. 102	V. 97	N. 92	N. 86	N. 86
stanau māṃsagranthī	V. 21	V. 19	V. 21	V. 20	V. 19	V. 16	V. 39	V. 16
strīmudrāṃ kusumāyudha	S. 50	S. 51	S. 55	S. 49	S. 48	S. 64	S. 78	S. 79
sthālyāṃ vaidūryamai	. . .	N. 69	N. 54	N. 52	N. 51	N. 100	N. 97	N. 96
sthitiḥ puṇyeraṇye	V. 38	. . .	V. 37	. . .	. . .	. . .	. . .	. . .
snātvā gāṅgaiḥ payo	. . .	V. 82	V. 95	V. 88	V. 82	V. 83	V. 88	V. 88
spṛhayati bhujayor	. . .	N. 97	N. 95	N. 94	N. 92*	. . .	. . .	. . .
sphuratsphārajyotsnā	V. 45	V. 38	V. 44	V. 41	V. 38	V. 80	V. 85	V. 85
smitaṃ kiñcid vaktraṃ	S. 27	S. 27	S. 29	S. 26	S. 25	S. 6	S. 6	S. 6
smitena bhāvena ca	S. 5	S. 8	S. 8	S. 8	S. 8	S. 2	S. 2	S. 2
smṛtā bhavati tāpāya	S. 28	S. 28	S. 30	S. 27	S. 26	S. 73	S. 43	S. 42
srajo hṛdyāmodā vyaja	S. 103	S. 91	S. 94	S. 90	S. 88	S. 39	S. 87	S. 88
svalpasnāyuvasāvaśeṣa	N. 32	N. 33	N. 34	N. 36	N. 29	N. 30	. . .	N. 22
svādiṣṭhaṃ madhuno	V. 7	V. 101	V. 7	. . .	. . .	. . .	. . .	. . .
svāyattam ekāntaguṇaṃ	N. 90	N. 91	N. 89	N. 88	N. 86	N. 7	N. 7	N. 7
harturyāti na gocaraṃ	N. 12	N. 11	N. 11	N. 11	N. 10	N. 16	N. 12	N. 12
hiṃsāśūnyam ayatna	V. 11	V. 10	V. 11	V. 11	V. 10	. . .	V. 97	V. 97
hemante dadhidugha	S. 97	S. 97	S. 100	S. 96	S. 94	S. 48	S. 95	S. 97

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The Parvasaṃgraha of the *Mahābhārata**

This note, based upon a numerical and statistical analysis of the first five books (*parvans*) of the *Mahābhārata* (*Mbh.*) now available in the critical edition[1] presents evidence for the view that the Parvasaṃgraha (Par.) figures give very accurate counts of some recension. The critical edition approximates to this recension, but in general reaches a little behind it. On the present manuscript evidence, there can be no hope of restoring the Par. recension itself. During the course of the study, the concept of textual fluidity can be given a somewhat more precise definition than hitherto, as regards the *Mbh.*

1. The first three chapters (*adhyāyas*) are palpably among the final additions made to the work during the long course of its original expansion. This is generally admitted because of the duplicated opening: *lomaharṣaṇaputra ugraśravāḥ sūtaḥ paurāṇiko naimiṣāraṇye śaunakasya kulapater dvādaśavārṣike satre* (1.1.1. and 1.4.1) which occurs at the beginning of the first as well as of the fourth chapter. A reference to Mr E.D. Kulkarni's counts[2] following this paper will show that these chapters are very much longer than any of the rest in the Ādi. Modern statistical analysis of the type utilized towards the end of this paper shows that there is very little chance of these three chapters belonging to the same distribution of *adhyāya*-lengths as the remaining 222 in the same Book. To make the position clearer, however, it is worth while demonstrating that these three chapters (each of which is also a sub-*parvan*) are remarkably self-contradictory even for an epic that pays little attention to logical development of its narrative.

The first chapter, the *Anukramaṇī*, corresponds to what would be, in a modern work, a combination of prefaces to several editions, reviews of

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the work itself, and the publisher's advertisements. The status of the work is very curiously described. The bard (*sūta*) Ugraśravas, son of Lomaharṣaṇa, is versed in mythology (*paurāṇika*), so that no surprise need be felt when the narrative (*ākhyāna*) is called a *purāṇa* (1.1.15); it was originally composed by the dark (*kṛṣṇa*) Dvaipāyana (1.1.8, 15). This purāṇic contention, incidentally, is borne out by the studies of Ruben,[3] which prove the claim of the *Mbh.* to be regarded as a *purāṇa*, or even the *purāṇa*. But the work is also a history (*itihāsa*) in 1.1.16; this too may pass muster because of the historical or pseudo-historical character of the main event, the great war described in the epic. The poem then rises a step higher in the scale of sanctity to parade as a *saṁhitā* (1.1.61), then as an *upaniṣad* (1.1.204) and finally reaches the peak of sanctity as a *veda* (1.1.204). There is nothing to show how or why this progressively higher status was achieved; the work is at one and the same time all of these. Yet the accepted divisions (of scripture) as given by Patañjali (*Mahābhāṣya* 1.1.1.5, Kielhorn, pp. 9, 1. 20–5), or even by the Buddhists (*Milindapañho*, Trenckner, pp. 3, 178), show that *purāṇa, itihāsa, upaniṣad*, and *veda* are all distinct; it would be impossible for one work to appear simultaneously as two or more of these if the older tradition were followed. Moreover, the function of this variously described composition is shockingly different from that of any of the authentic Brahminical scriptures. It is in fact to delineate the three *śāstras* of *dharma, artha, kāma*; as it were, ethics, economics, erotics (a poor equivalent for *kāma*). To anyone who took seriously the injunctions laid down for the observance of physical and mental purity during the study of sacred texts, such a claim would be blasphemous when made for any document on the level of a *veda* or even of a *upaniṣad*.

Still more interesting is the nomenclature and extent of the work. To be sure, it is called the *Mahābhārata* near the beginning (1.1.10), but the name throughout is merely the Bhārata. The adjective is explained at the end (1.1.208–9). The greatness is not derived from the extent but from its importance and weight, for it outweighed all the four *vedas* taken together when the gods and the sages put it in the other pan of the balance. Thus, the *mahā* is not an official part of the original title, just as the adjective *divina* was prefixed to Dante's Commedia by a later enthusiastic publisher. Moreover, we are told that the learned recognize as the Bhārata a work of 24,000 (stanzas or *śloka*), without any of the minor episodes (*upākhyāna*); to this the sage added an Anukramaṇī chapter of 150 stanzas as an epitome (1.1.61–2). Yet this composition of the sage, presumably Kṛṣṇa-Dvaipāyana-Vyāsa, is the same Bhārata as the present much more extensive work. The difference is trifling, the work is after all one which the twice-born possess in both the expanded and contracted forms: *vistaraiś ca samāsaiś ca dhāryate yad dvijātibhiḥ* (1.1.25). The sage uttered it in both the expanded and contracted forms: *vistīryaitan mahaj jñānam ṛṣiḥ saṁkṣepam abravīt* (1.1.49). In fact, some are skilled in explaining the work, others only in sticking to the text: *vyākhyātuṁ kuśalāḥ kecid granthaṁ dhārayituṁ pare* (1.1.51).

This can mean only one thing: at the time the text of the critically edited Ādi was composed there still existed a much shorter version of the epic which had full authority among the orthodox, and this new version could gain its own authority only by claiming to be the same as the shorter work in a more understandable form, not by ignoring the shorter work or by claiming to be a new one. This would be impossible for a *veda* or an *upaniṣad*, whose texts, at least in theory, are unalterable. So claims to special merit are made again and again, both for the whole of the present version (1.1.191–8) and for the new beginning, the Anukramaṇī itself (1.1.199, 200, 206). The rather mixed claims to religious merit and scriptural equivalence surely indicate efforts made to gain sanction for what was, after all, a popular work—a compendium of ethics, economics, erotics—meant for persons of little learning whereas the real *veda* shied at such: *bibhety alpaśrutād vedo* (1.1.204). The position at the time of composition must have been precarious, both as to authenticity and religious importance of the text we now possess.

2. This same performance, rather shifty as well as self-contradictory, continues in the second chapter which is a list of contents of the entire work. Here we learn that the work as originally composed by Vyāsa in a hundred *parvans* was recast by the bard into eighteen and recited in that form in the Naimiṣa forest (1.2.70–1):

etat parvaśataṁ pūrṇaṁ vyāsenoktaṁ mahātmanā
yathāvat sūtaputreṇa lomaharṣaṇinā punaḥ
kathitaṁ naimiṣāraṇye parvāṇy aṣṭadaśaiva tu
samāso bhāratasyāyaṁ tatroktaḥ parvasaṃgrahaḥ

The list of original *parvans* does actually add up to a hundred, dispelling the controversies raised by those who based their conjectures on editions other than the critical. But there is a fundamental contradiction nevertheless in the entire passage, which is supposed to have been recited by Lomaharṣaṇi himself, beginning with 1.2.15. The beginning is innocuous enough, as the sages ask the bard to define the extent of an army corps (*akṣauhiṇī*) and he gives the size in quite fantastic numbers; then he says that eighteen such divisions were destroyed in the great war, gives the extent of the original narrative, and then says himself that he recited the work in its revised form before the sages—when he has hardly begun the recital! However one may attempt to smooth the difficulty over, it is impossible to explain the contradiction entirely away. The use of the past participle *kathitaṁ* spoils the game, which could have been saved by using the future tense.

Furthermore, when the number of chapters in the revised first book, the Ādiparvan (which does not figure in the original hundred), comes to be given, the division is again passed off as Vyāsa's composition (1.2.95–6). It remains to note that the Par. also ends with praise of the Bhārata, the merit to be acquired by its recitation or by hearing it recited. The penultimate *śloka* (1.2.242) is in the *vasantatilakā* metre, the final one being a *praharṣiṇī* (1.2.243). Though both have the proper ending—ux, they are unquestionably later 'fancy' metres, being almost unique examples in the critical text. Therefore, the boast that the narrative is the sustenance of all the leading poets (1.2.241) also becomes suspiciously indicative of late composition.

In the third chapter, the Pauṣyaparvan, one need only note the horrible mess that has been made of the hymn to the Aśvins. According to Renou,[4] 'On sait que ce poème imite délibérément la manière des hymnes védiques . . . Bref, si le style est pseudo-vedique, le rythme est upaniṣado-pali.' This, with the extraordinarily corrupt text, goes to show that those who transmitted the narrative did claim to be Brahmins, did attempt to substantiate their further claim that this work was a *veda*, or at least had vedic embellishments: *vedārthair bhūṣitasya ca* (1.1.16). But their scholarship was of no high order. We are not dealing here with a revival of Hinduism of the sort that must have occurred in the days of Puṣyamitra and Patañjali, but a resurgence in a new form, oriented towards the people rather than based upon the possession of obscure and archaic ritual.

Yet, with these considerable doubts on the fitness and consistence of these prefatory chapters, we note that the manuscript evidence (apart from correspondences as between 1.1 and 1.56) completely proves their authenticity; in fact even their popularly accepted text survives with comparatively trifling changes. This brings us to our real problem: What weight should we attach to the detailed figures given in the Par.? What do the numbers given for each book of the whole *Mbh.* indicate?

3. The late Dr V.S. Sukthankar considered as negligible the editorial uses of the Par.[5] His objections to taking the Par. seriously may briefly be summarized as follows: (1) What text of the Par. should the editor take

as authentic from so many divergent manuscript readings? (2) What would be the meaning of the unit *śloka*, generally taken to indicate a stanza, when the text contains all sorts of metres and long prose passages? What is the proper method of counting? (3) In any case the text contains so many variants that even if the Par. figures were unique and there were no difficulty about the method of counting, a sound critical method would be needed to determine the proper reading. The same method, however, would fix the entire text without recourse to the Par. (4) The text is fluid, so that its absolutely precise determination should not be considered as a serious possibility. Finally, he gave it as a guess that the Par. figures were probably obtained by counting a few pages at the beginning and end of the manuscripts carefully, and estimating the remainder by averaging the number per folio.

Now this last explanation of his contradicts (2) above in that it implies the existence of some method and unit of counting. In fact, Sukthankar himself believed in Haraprasad Sastri's traditional interpretation (*Ādiparvan* xcix) that the *śloka* here was to be taken in its restricted meaning of 32 syllables, and everything in the manuscript down to the numerals counted accordingly. As to (1), the critic might very well ask why Sukthankar did not check his own critically edited Par. against the actual contents of the books of the critical edition. As a matter of fact, the editors (among them S. K. De who noticed that the numbered *ślokas* in his Udyoga amount to 6063, far shorter than any Par. figure) pay very little attention to the Par. Sukthankar's final paper shows his state of doubt clearly, when he attempts to settle the Par. figures by comparison of his own critical text with the Javanese and the Southern recensions; this contradicts his own usually rigorous and brilliantly applied method, in that his text of the Par. is based on an extensive manuscript apparatus whereas the other two are single versions, edited by rather doubtful methods.

The one real, valid objection is, of course, (3) above: that a sound canon of text-criticism would be needed to select the proper readings from a vast and conflicting array of manuscripts, and this by itself determines the entire text without any attention to the Par. The question that still remains would be that of the original function of the Par. itself, not of its use to the editor. No criticism made here is to be taken as directed in any way against Sukthankar's editorial method, for which any intelligent person could have nothing but the highest admiration. If we can see a considerable distance through the epic wilderness today, it is only because of the path he cleared for us with giant stride.

The theory of the fluid text is more difficult to deal with. The idea seems intuitively clear to any Indian without further explanation, though a western scholar like Edgerton naturally dismisses it as meaningless. In any case, it is beyond doubt impossible to restore the absolute archetype. For example, *sūta uvāca* may be replaced in the recitative directions by *sautir uvāca*, or *lomaharṣaṇir uvāca*, and to the uncritical Indian eye (which alone roamed over the manuscripts till a century ago) there is no real difference. To the question 'which is the real reading?' the reply would be 'any or all of them!' But was there any fluidity about the *ślokas* themselves? Should not the wavy line that runs through so much of the critical text be taken as evidence of fluidity? In justice to Sukthankar, it should be said that in spite of his undefined concept of fluidity, he himself defended his own critical text, even the wavy line readings, with consummate skill, as may be seen in so many of his epic studies. I believe I owe it to his memory to interpolate here a personal record which will make it clear that the theory of the 'fluid text' never interfered with his faith in the superb critical method. When the text of the Ādi was virtually complete, I questioned him as to the possibility of invalidation by some future discovery of a manuscript much older than any used in his critical apparatus. He considered the idea in his usual calm, judicial manner and said that the possibility could certainly not be denied. Then with a sudden flash of the inner spirit, so rare with him, he burst out, 'No! This text will stand no matter what discoveries are made later on. At the very most, an occasional wavy line reading may be exchanged for another in the critical apparatus.' I had the good fortune of reminding him of this remark, which he had himself forgotten, when the famous Rajaguru manuscript was discovered in Nepal, to confirm in spite of its antiquity not only his accepted readings but many even of his judicious emendations which were not to be found in any manuscript of the original critical apparatus.[6] So, his undefined concept of the fluid text cannot be of any use to us here.

4. The most striking feature of the criticism levelled against Sukthankar's neglect of the Par., and of his own defence, was the total absence on both sides of any numerical data. The critical text had never been properly counted. Having admitted the justice of this criticism of mine (made in private conversation), Sukthankar directed his staff of learned scribes, pandits, and sastris in the collation department to count the edited text by any method they considered traditional. The work was interrupted by his sudden and untimely death. Whatever had been done was handed over to me, but a brief check sufficed to convince me that the data so gathered was useless. Besides actual errors of counting and arithmetic, the omission of *adhyāya* colophons and the *uvāca* insertions made serious

differences inevitable. My own supplementary counts, however, made it clear that the Par. was a document to be taken seriously, and for that reason the entire published text had to be counted again by some one who would take the utmost care, but who had no theory to prove or disprove as I did.

Mr Kulkarni took up the problem at my suggestion, and I have every reason to believe that his work is satisfactory, on both the above scores. My criterion for the counts was derived from the recitative purpose of this (or any other ancient Indian) text: every syllable that is pronounced must be counted. Thus, only the *avagraha*, the numerals at the end of each *śloka*, the *adhyāya* heading numbers, and the vertical bars that terminate each half-*śloka* had all to be taken as silent punctuation marks, therefore not counted. There does, therefore, remain a slight ambiguity; but the result, it seems to me, justifies my reasonable criterion. Taking the counts of just five books out of a total of eighteen would seem rather premature, but there remains no alternative to one who is not certain of surviving to the completion of a critically edited text. The results may be summarized in

Table I

Books	Ādi	Sabhā	Āraṇyaka	Virāṭa	Udyoga
Par. chapters	218	72	269	67	186
Actual chapters	225	72	299	67	197
Par. *ślokas*	7984	2511	11664	2050	6698
'Official' stanzas	7196	2390	10316	1824	6063
syllables/32	7964.125	2599.53125	11421.000	2036.000	6754.4375

What do these figures tell us?

In the first place, the chapters are never less than the number indicated in the Par., actually greater in three out of the five cases; moreover, the *adhyāya*-number automatically counts itself by means of the colophons. If this indicates changes in the text as such, they should naturally be in the direction of inflation, not contraction. But if we count the official number of stanzas, remembering that even the prose passages are divided into convenient though not exactly regular lengths and numbered as *ślokas*, we find that in every case without exception the observed number comes out to be far below that expected from the Par. The difference is very highly significant, using the statistician's chi-square test. So, the method of counting did not take *śloka* as a stanza. Taking the total number of syllables divided by 32, we see at once that we come extraordinarily close to the Par. *śloka*-number, and that the text we now possess does actually represent something of very nearly the Par. lengths. The *adhyāya* discrepancy may be explained by the fact that a chapter is a recitative unit, not a narrative one; many of them break off in the middle of some incident and the next begins at the right place. Hence, the most plausible interpretation would be that the text length has been restored to an excellent approximation, but that the *adhyāyas* were broken up into more convenient lengths since the Par. days, hence could not be restored as neatly as the text.

The method of counting, therefore, may be taken as reasonably well determined. The 32 syllable units is traditional even in prose counts of Jaina and Mahāyāna Buddhist works; according to my colleague Dr V.V. Gokhale, the latter take *āśvāsa* to mean the unit of 32 syllables, explaining it as the number that can conveniently be uttered in one breath. The method of counting may ultimately be traced back to the dual system to be seen in the weights of Mohenjo-Daro. The work of Piṅgala on Vedic metre gives a highly artificial series progressing by differences of four syllables; the quadragesimal system survives to the present day in Indian currency, and is used in accounting with its own special notation. The statistical argument of the previous paragraph is that while 'official' stanzas as *śloka* would give, except for Sabhā, probabilities of less than one in a million (by chi-square), the 32-syllable unit gives a significant discrepancy only for the Āraṇyaka, where the probability is about 2.75 per cent of so great a difference in either direction from the expected total of 11,664. Finally, if we count the very shortest of all *parvans*, the Mahāprasthānika (no. 17), from the Vulgate, we find its stanzas to be 109, whereas the 32-syllable unit gives 120 and a fraction over, very close indeed to the Par. Figure of 120 *ślokas*. It cannot be argued that so short a *parvan* had to be counted by some method of approximation.

In fact, it is rather difficult to settle the conjecture of Sukthankar's (*ABORI Silver Jubilee volume*, 550) that the *śloka* counts were estimated by folio averages. Taking modern printed and lithographed *pothi*-styled works and my own random sample counts as a guide, I conclude that the Ādi figures, for example, could have been estimated to about 15 *ślokas* (taking 2s as the confidence interval). With Gupta period copper plate inscriptions, the estimate could have been made to about 25 *ślokas*. But this is very misleading in that the line and not the page is taken as my fundamental unit; or what amounts to the same thing, a constant number of lines per page has been assumed. I have seen no long manuscript where there are no gaps, no abbreviations, and the number of lines is exactly the same from page to page; so, such accurate estimation would seem definitely out of the question. In any case, none of the Par. figure variants can possibly have been obtained by such estimation because these variants make a point of changing the Par. reading as little as possible. The last two digits are usually retained, some change being made in the hundreds or the thousands to bring the number nearer to the actual bulk of the *parvan* in the recension concerned. I feel justified in maintaining that the original Par. figures must have been obtained by the diaskeuast from accurate counts, syllable by syllable, of some text before him. It follows that he had a recension which he considered as the norm. The purāṇic taste for large numbers and grasp of the necessary arithmetic are both demonstrated in the *akṣauhiṇī* definition which precedes the counts (1.2.15–23).

5. What interpretation should we give to the accurate *śloka* counts coexisting with manifestly wrong *adhyāya* figures?

As has been said before, the *adhyāya* number has generally been increased for recitative purposes. The average number of *ślokas* calculated from the Par. figures themselves would be, for the five *parvans* before us: 36.62; 34.86; 43.36; 30.6; 36.01. It is to be noticed that the highest average, the Āraṇyaka, is cut down to an actual 39.01 by the great addition of 30 *adhyāyas*. The Udyoga average was reduced by the increase of 11 in *adhyāya* number, the Ādi has only seven more chapters that the Par. text gives, but we must note that the average length is still further reduced if one leaves out the first three—palpably later—chapters which are inordinately long. The two shortest parvans, Sabhā and Virāṭa, have also the lowest mean value for chapter length, and it is to be noted that they have exactly the same number of *adhyāyas* as originally given by the Par. It will be interesting to see whether this tendency towards reduction of *adhyāya*-length to a more convenient average is present in later *parvans*. The entire work, according to the Par., has 82,136 *ślokas* in 1948 chapters, which gives the average of 42.16, much higher than in any book of the critical text so far available.

Every additional *adhyāya* means, even if no *śloka* is changed, increase in the text by at least one colophon. Yet our critical edition shows reduction in the śloka number except in the Udyoga *parvan*, where the difficulties of both editor and tabulator are increased by such passages as the Sanatsujātīya (5.42–5), and in Sabhā, discussed later. The discrepancy is most serious for the Āraṇyaka, where all Indian variants of the Par. agree as to 11,664 *ślokas*, and only the Javanese version gives a different reading which, incidentally, is significantly closer to the number actually counted. This *parvan* is remarkable (Introduction to the *Āraṇyakaparvan* xvi) in that here the northern recension is longer than the southern, contrary to all other examples so far known.

Incomplete as the evidence is, one may venture upon a plausible conjecture to explain these observed facts. The *Mbh.* in its formative period was the property of a single Brahminic gens, the Bhārgavas.[7] The story was becoming very popular, having spread to South India by the end of the fourth century, as is seen by Buddhaghoṣa's reference and the injunction that it was not lawful for good Buddhists to attend such recitals: Dīghanikāya Aṭṭhakathā, *PTS* 1.84: *Akkhānaṁ ti Bhārata-Rāmāyaṇādi; taṁ yasmīṁ ṭhāne kathīyati, tattha gantum na vaṭṭati.* Before the completion of the second century of the Gupta era our epic has gained tremendous authority; Vyāsa is quoted in making land grants, and the *Mahābhārata* is cited as such by name. We have come far from the days when the ridiculous etymology of 1.1.209 *mahattvād bhāravattvāc ca mahābhāratam ucyate* was necessary. But the body of the narrative must have been complete by the beginning of the fourth century if Purāṇas recast in their present form by AD 330[8] could take the *Mbh.* text as base.[9] Granting the first three chapters of the first book as final additions, one can only regard the Par. as an attempt to fix the text when an enormously increased demand was already in sight.

Even at the beginning of such a period of enhanced popularity, it would be most difficult to retain the text as the sole property of a small or at least a compact group of bards. Some attempt at fixing the text would, therefore, be logical and necessary. Now it is clear that not even the prodigious memory of a good Indian *paṇḍita* could retain the entire work; but a *parvan* or two, say 10,000 *ślokas* in all, would not be considered too much to memorize, as there are old-fashioned Brahmins even today—in rapidly decreasing number—who demand this of their boys. The memory of any person old enough to be considered as an authority represents, in the main, the tradition of some thirty years earlier, apart from possible defects of transmission arising in his own mind. The very existence of the Par. shows that there could have been no local versions (leaving aside the older and shorter Bhārata) of the *Mbh.* then being recited, comparable in divergence to our present northern and southern recensions; but the need for a Par. with accurate *śloka* counts would seem to indicate that minor variants had already begun to be committed to writing. This would occur at a period when the work was still a popular recital, not a super-*veda*. That is, when the subject matter was more important than the exact words in which the story was recited. Thus, the Parvasaṃgraha recension would not be the original source of our present manuscript evidence, but these manuscripts would derive (at several removes) from various slightly divergent versions written, or at least memorized, a generation or so earlier than the text the Par. diaskeuast attempted to fix. For, there was no way of putting a fourth-century manuscript before the public in a vast number of copies, no way of erasing variants from human memories. The veterans would still have to be consulted when more copies were to be made; the copies do not necessarily derive from a manuscript, but are very likely to be taken down by dictation from memory. For all these reasons, the critical edition indicates, in my own opinion, a pre-Par. state of fluidity. We are not restoring the actual Par. recension in general. The process of taking the highest common factor from best available manuscripts reaches to some point, or rather to several points, on the parent stem of tradition from which both the Par. recension and our present manuscript evidence would have been derived. The result is in many ways analogous to the starred forms of the philologist which explain numerous extant cognate derivatives, though all the starred forms themselves need not have existed simultaneously in any single living language. Our critical edition, therefore, may not represent any particular version or recension recited at one time, let alone the Par. recension. The *Mbh.* was as living as any language, as changeable; the wavy lines in our printed text may go back to a stage behind the Par. But even further, the text as reduced to print in the critical edition may be taken as the starred form of a great and living tradition. This is the meaning we must ascribe to Sukthankar's concept of fluidity, and to his idea that an absolute archetype would remain an ideal impossible of attainment (*Ādiparvan* ciii).

Sabhā needs special comment as its editor does not subscribe to the fluid text theory and believes (this is my impression, as the volume has not yet been issued)* that the archetype has been restored in all essentials. This may certainly be true, but the archetype cannot possibly be the version before the original composer of the Par. For, in the first place, the serious excess of 88 *ślokas* and 17 letters is still less serious than the default found if *śloka* is interpreted as 'official' stanza. The discrepancy between our counts and the Par. figure remains much too large to be explained by Sukthankar's approximation theory, for any reasonable method of approximation would give much closer results. The only variant in Par. readings that might help us here is the 2611 of D_1, and this is not likely to be received with any favour, seeing the uniformity of the most reliable manuscripts, and the poor show that the D group makes in

*[Edgerton, F., ed., *The Sabhāparvan*, Being the Second Book of the Mahābhārata, The Great Epic of India, Poona, 1944.]

contrast with the rest. There are no extra adhyāyas, and there seem to be no specially difficult passages. All that can be said is that the *triṣṭubh* stanzas, particularly the 'hypermetric' ones, tend to bunch towards the end of the *parvan*, though it is difficult to see how this helps in the matter under consideration. It should not be taken as an unreasonable conclusion if one decides that Sabhā derives from a later or at least more inflated version than the Par. recension, just as Āraṇyaka seems to have developed from an older one. It may be noted in passing that the actual figure is very near to the 2590 in the colophon of S_1 (perhaps repeated from the missing S_1 Par.), the manuscript being the one most favoured by our editors.

6. Something may be done from more refined statistics applied to the study of *adhyāya*-lengths. Mr G.U. Yule[10] has reached the conclusion, by use of Pearsonian statistics, that the Imitatio Christi shows sentence-lengths compatible with the style of Thomas à Kempis, not with that of Gerson (Groote being left out of consideration). We cannot discuss sentence lengths here, as the work is mostly in verse without modern punctuation. But *adhyāya*-lengths may be so discussed. The statistics I use derives from R.A. Fisher; and I leave out all details and technical terms, merely giving enough description of the method to show anyone who knows the subject how my conclusions were drawn; at the same time, the pure philologist will not be bored.

The distribution of *adhyāya*-lengths is not normal (using the word always in its technical sense). The curves would be asymmetrical, having a long tail to the right, and a flatter top than in the familiar bell-shaped curve that everyone has seen. To overcome this, I use a well-known device, of taking logarithms. The distributions are again tested for normality. As, even in the worst cases, anormality is sensibly reduced, one can apply the technique known as analysis of variance to see whether the variation between sub-*parvans* is of the same order as that within a sub-*parvan* (of the same book). Normality of the entire distribution in logarithmic units would not necessarily prove, but would be compatible with, the hypothesis of composition by one person at one time; similarly, uniform sub-division into sub-*parvans* would be compatible with the idea that the recension was unitary or done by several similarly constituted persons. The results are as follows.

The shortest *parvans*, Virāṭa and Sabhā, are both normally distributed and show uniform division, so that they may have been derived from works of unitary authorship; of course, no one would maintain that Virāṭa, statistically the most satisfactory of all the books before us, represents the Par. recension, if only for the wavy line that runs so prominently through the printed text. Ādi and Udyoga are anormal, the sub-*parvans* also vary materially among themselves in both cases, even when we leave out the first three chapters of Ādi on grounds made clear at the beginning of this paper. Āraṇyaka is decidedly skew-positive platykurtic, but surprisingly enough bears no sign of uneven division into sub-*parvans*. That is, it may have been composed by different people at different times, but the process of subdivision was more or less uniform.

NOTES

1. *The Mahābhārata . . . critically edited* by V.S. Sukthankar (Poona, Bhandarkar Oriental Research Institute, 1933–).
2. E.D. Kulkarni, The Parvasaṃgraha Figures, following this paper.
3. W. Ruben, *JRAS* 1941, 247–56 and 337–58; also *A Volume of Eastern and Indian Studies presented to F.W. Thomas* 188–203. See also M.S. Vaidya, *ABORI Silver Jubilee Volume* 609–20.
4. L. Renou, *A Volume of Eastern and Indian Studies presented to F. W. Thomas* 177–87.
5. Prolegomena to his *Ādiparvan*, esp. xcvii-c; Introduction to his *Āraṇyakaparvan; ABORI Silver Jubilee volume* 549–58.
6. V.S. Sukthankar, Epic Studies VII, in *ABORI* 19, 201–62 (1938).
7. V.S. Sukthankar, Epic Studies VI, in *ABORI* 18, 1–76 (1936).
8. F.E. Pargiter, *The Purāṇa Text of the Dynasties of the Kali Age* (Oxford, 1913).
9. See fn. 3.
10. G.U. Yule, *Biometrika* 30, 363–90 (1938).

Appendix: The Parvasaṃgraha Figures*

E.D. KULKARNI

In spite of numerous discussions that have taken place among Epic scholars as to the reliability of the Parvasaṃgrahaparvan, in the second *adhyāya* of the Ādiparvan, no numerical data of any reliability has, so far I know, ever been given on which any valid conclusions could be based. The first part of this paper, therefore, contains all available manuscript variants for the Parvasaṃgraha figures of *adhyāyas* and *ślokas*. These had to be gathered from the critical apparatus published in the late

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Dr Sukthankar's standard Edition of the Ādi. This is a necessity because these figures are spread over several stanzas for each *parvan*, so that it is almost impossible to grasp all the variants at a single glance. The compactness introduced by my parallel figures will, I hope, facilitate such comparison. In addition to the manuscript apparatus proper, the reading accepted by Sukthankar and the readings from the following versions have been included: (1) P.P.S. Sastri's Southern Recension, (2) an edition published about some years ago by some Pandits at Madras in the Telugu characters (this I have referred to as the Madras edition), (3) Javanese version, (4) Nepālī Ms. belonging to Panditjiu Hemaraj, (5) Calcutta edition (Vulgate) printed in 1834-39, (6) the *pothi*-form edition published by Ganapata Krisnaji at Bombay Śaka 1799, (7) Chita Shala edition (Poona), (8) Kumbhakonam edition published by Krishnacharya (this I have called Kumbhakonam Edition¹), (9) Jñānadīpikā of Śridevabodha, edited by Dr Dandekar, 1941.

The Section B of this first part may not be of much use, but still had to be given for the sake of completeness. The numbered counts from the printed editions mentioned above and from the following editions, have been given without inquiring into their accuracy (notoriously poor for the Calcutta Vulgate), or even to the meaning or meanings they ascribed to the unit, *śloka*. (1) An edition issued by Gopal Narayan and Co. at Bombay, (2) an edition issued by some Pandits of Kumbhakonam but printed in the Devanagari character at Bombay in 1906 (this I have called Dravid Texts), (3) the edition from Madras but printed at Kumbhakonam (this I have styled Kumbhakonam Edition²), (4) Pratap Chander Roy's Edition printed at Calcutta between the years 1882-1890.

The second part contains the material against which the accuracy of the Parvasaṃgraha must necessarily be checked. Every pronounced syllable of the text in the Bhandarkar Oriental Research Institute's Critical Edition, so far available (for the first five Parvans), has been counted and entered *adhyāya* by *adhyāya*. As each syllable in general represents a letter in the alphabet employed, special care was taken not to count half letters at the end of a *pāda*, the *avagraha* symbol, numerals at the head of each *adhyāya*, and numerals at the end of each stanza. In addition, the counts have been classified according to the form; *anuṣṭubhs* of four and six *pādas*, and *triṣṭubhs* of four and six *pādas*. The *anuṣṭubh* of a *pāda* is taken as eight syllables regardless of the classical restriction on fifth, sixth and seventh syllables. The hyper-metric and occasional sub-metric lines have been noted by the editors and are indicated in my counts by a plus sign followed by the additional number of syllables or by a minus sign followed by the number of syllables lacking. A brief check seems to show no hyper-metric lines missed by the editors. The *triṣṭubhs* are not considered by the editors with the same care, so that for convenience of enumeration I have standardized a *triṣṭubh* line of eleven syllables regardless of scansion and indicated anything over as hyper-metric. It goes without saying that almost all the *triṣṭubh* line (though not necessarily the whole *śloka*) have peculiar and well-marked patterns of scansion. But this is a problem which I mean to consider in a separate paper.

'Prose passages' include the total number of syllables in the *adhyāya* colophons and *uvāca* insertions, occasional long prose passage being marked by the plus sign. Although the prose is divided into uneven *ślokas*, the counts here were not made *śloka* by *śloka*. Lastly the famous *maṅgalācaraṇa śloka—nārāyaṇaṃ namaskṛtya* etc. of the Ādi, has not been counted, as its inclusion rests upon tradition but not upon manuscript evidence, and Sukthankar himself chose not to number it.

To minimise clerical errors, the stanzas of each sort are checked against the stanza-total for each *adhyāya*. The syllables for each type of stanzas are calculated separately and their totals for each page of entry (which do not correspond to the printed pages) are checked against the corresponding stanza-totals. Finally the *akṣara*-totals are checked and cross-checked by addition across and down the page. The major portion of this work is done with the aid of a calculating machine, so that freedom from error may reasonably be assumed for the final entries.

I have deliberately refrained from drawing any theoretical conclusions as to the Parvasaṃgraha itself. This paper is restricted to a statement of facts.

I am very much obliged to Prof. D.D. Kosambi, for suggesting to me the preparation of this paper and helping me substantially at every stage with his guidance and books. I have to thank Dr S.M. Katre, the Director, Deccan College Research Institute, under whom I am working as a University Scholar, for encouraging me and for giving me the most valuable suggestions, now and then, in the preparation of this paper. I have also to thank the staff of the Mahābhārata Department at the Bhandarkar Oriental Research Institute, Poona, for giving me facilities in this study.

My own efforts over this paper I respectfully dedicate to the memory of the late Dr V.S. Sukthankar.

The Parvasaṃgraha Figures of *adhyāyas* (Part I, Section A)

Parvan	K	V	B	D	Da	Dn
1. Ādi	K_0 $\underline{218}$; K_1 $\underline{230}$; K_3 230; $\underline{272}$		B (except B_4) 227; B_4 228	D_2 $\underline{200}$		
2. Sabhā	K_0 $\underline{78}$; $K_{2.3}$ $\underline{72}$; K_4 78			$D_{1\text{-}14}$ 78	$Da_{1.2}$ 78	78
3. Āraṇyaka	K_0 $\underline{259}$					Dn_1 $\underline{269}$
4. Virāṭa	K_0 $\underline{67}$; K_1 64; $\underline{67}$			D_4 $\underline{70}$; D_7 $\underline{72}$; $D_{8.9}$ 72; D_{10} 67		
5. Udyoga	K_0 $\underline{86}$; K_4 100	100	100	D (except $D_{2.14}$) 100; $D_{1.2.8}$ $\underline{186}$		
6. Bhīṣma	K_0 $\underline{117}$; K_4 118					
7. Droṇa	K_0 $\underline{170}$					
8. Karṇa	K_0 $\underline{69}$					
9. Śalya	K_0 $\underline{59}$					
10. Sauptika	K_0 $\underline{18}$					
11. Strī	K_0 $\underline{37}$					
12. Śānti	K_0 $\underline{339}$; K_6 329			$D_{10.11}$ 329		Dn_3 329
13. Anuśāsana	K_0 $\underline{146}$; K_2 156					
14. Āśvamedhika	K_0 $\underline{103}$; K_6 103	103	$B_{1.2.3.4m}$ 103	$D_{3.4.6\text{-}13}$ 103		
15. Āśramavāsika	K_0 $\underline{42}$; K_1 43			D_{14} 40		
16. Mausala	K_0 $\underline{8}$					
17. Mahāprasthānika	K_0 $\underline{3}$					
18. Svargārohaṇa	K_0 $\underline{5}$					

	Dr	T	G	M	Sukthankar Edition[1]	Sastri Edition	Javanese Version[2]	Vulgate	Ganapata Krisnaji[3]	Chitra-Shala	Kumbha-konam[1]	Jñāna-dīpikā
1.				218	218	218	218	227	227	227	227	218
2.	78				72	72	72	78	78	78	78	72
3.					269	269	272	269	269	269	269	269
4.					67	67	...	67	67	67	67	67
5.					186	186	186	186	186	186	186	186
6.					117	118	117	117	117	117	117	117
7.					170	170	170	170	170	170	170	170
8.			G_7 111		69	69	69	69	69	69	69	69
9.					59	59	121	59	59	59	59	59
10.		T_2 27			18	18	18	18	18	18	18	18
11.					27	27	70	27	27	27	27	27
12.	$Dr._2$ 329				339	339	333	339	329	329	329	339
13.		$T_{1.2}$ 256	$G_{2\text{-}7}$ 256	$M_{2\text{-}4}$ 256	146	156	...	146	146	146	146	42 (?)
14.	103				133	133	133	103	103	103	103	107
15.			$G_{2.3}$ 40	$M_{1.3}$ 43 $M_{2.4}$ 40	42	42	92	42	42	42	42	42
16.					8	8	8	8	8	8	8	8
17.					3	3	...	3	3	3	3	3
18.					5	5	...	5	5	5	5	5

—— The underlined figures are taken from the colophons at the end of first five parvans.

~~~~ printed below any part of the figure indicates that the reading of it is uncertain.

[1] Rajguru's Nepālī Ms corresponds to the Sukthankar Edition in all its figures of Adhyāyas.
Śāradā Ms. gives 230 and 72 for the Ādi and the Sabhā.
Southern Recension gives 118 for the Bhīṣma.

[2] Cf. V.S. Sukthankar, *ABORI Silver Jubilee volume* 551.

[3] Cf. C.V. Vaidya, *The Mahābhārata*, appendix.
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The Parvasaṃgraha Figures of *ślokas* (Part I, Section A)

Parvan	K	V	B	D	Da	Dn	Dr
1. Ādi	K_0 $\underline{8984}$; 8884; K_1 $\underline{7984}$;	8984	8884	D_2 $\underline{8984}$; D_{2m} 9984;	8884	8884	8884
	$K_{2.4}$ 8984; K_3 9084;			$D_{1.3-7.9-13}$ 8884			
	$\underline{8984}$; K_6 9984						
2. Sabhā	K_0 $\underline{2511}$; K_2 2711;			D_1 2611			
	K_3 $\underline{2511}$; K_6 2711						
3. Āraṇyaka	$K_{0.2}$ $\underline{11664}$					Dn 11964	
4. Virāṭa	K_0 $\underline{2500}$; K_1 $\underline{2300}$	V_{1m} 2300	B_1 2500	D_6 3500; D_7 2300; $\underline{2500}$;	2500		
	K_3 2015; K_4 2050		$B_{2.3.4m}$2300	D_8 3500; $\underline{2500}$;			
				D_{9-10} 3500; $\underline{2500}$;			
				D_1 3500; $D_{12.14}$ 2300;			
				D_{13} 2500			
5. Udyoga	K_0 $\underline{6620}$; K_1 6888	6628	6628	D (except Da_2 Dn $D_{1.9-11.14}$)			
				6628; D_1 $\underline{7796}$; D_2 $\underline{6970}$;			
				D_8 $\underline{7798}$; $D_{9-11.14}$ 7998			
6. Bhīṣma	K_0 $\underline{5884}$;						6384
7. Droṇa	K_0 $\underline{9909}$; $K_{1.6}$ 9909	V_{1m} 9909	B_{1m} 9909	$D_{1.3.4.10.11.13}$ 9909	9909		
8. Karṇa	K_0 $\underline{4900}$		B_{1m} 5500	D_{14} 5500			
9. Śalya	K_0 $\underline{3220}$						

10. Sauptika	K_0 870						
11. Strī	K_0 775						
12. Śānti	K_0 16525; 14732; K_1 14932; K_2 14734; $K_{4.6}$ 14732	16525	B_1 (m as in text) 14732	$D_{1\text{-}4.6\text{-}9.12}$ 14732; D_5 24732; 14725	16525	14732	16525
13. Anuśāsana	K_0 8000; 6800; $K_{1.4.6}$ 6800	6800	6800	D (except D_{14}) 6800			
14. Āśvamedhika	K_0 3320; K_6 4420			D_{14} 4420			
15. Āśramavāsika				$D_{10.11}$ 1906			
16. Mausala	K_0 320; $K_{1.3.4.6}$ 320			$D_{1.2.4m.6.8\text{-}11.13}$ 320			
17. Mahāprasthānika	K_0 250; 320; $K_{1.2.4.6}$ 320; K_3 220	320		$D_{1\text{-}13}$ 320			
18. Svargārohaṇa	K_0 20; $K_{4.6}$ 209			$D_{1.3.4.6.8.9.11}$ 209		209	209

The Text Figures of *adhyāyas* and *ślokas* (Part I, Section B)

Parvan	Sastri Recen.		Vulgate		Ganapata Krisnaji	
	A	S	A	S	A	S
1. Ādi[1]	218	9984	234	8479	234	8466
2. Sabhā[2]	72	4511	79	2709	81	2709
3. Āraṇyaka[3]	269	11056	314	17478	315	11854
4. Virāṭa[4]	67	3500	72	2376	72	2327
5. Udyoga[5]	186	6667	197	7656	196	6618
6. Bhīṣma	118	5884	124	5856	122	5817
7. Droṇa	170	9555	203	9649	202	9593
8. Karṇa	110	5001	97	5046	66	4987
9. Śalya	59	3557	66	3671	65	3608
10. Sauptika	18	820	18	811	18	810
11. Strī	27	785	27	827	27	826
12. Śānti	339	15484	367	13942	366	13732
13. Anuśāsana	156	10249	168	7796	169	7839
14. Āśvamedhika	124	4613	92	2900	92	2852
15. Āśramavāsika	42	1108	39	1105	39	1085
16. Mausala	8	300	8	292	8	287
17. Mahāprasthānika	3	115	3	109	3	109
18. Svargārohaṇa	5	200	6	312	6	307

[1] Rajguru's Nepālī-Ms. gives the number of Adhyāyas as 225, which exactly corresponds to Dr. V.S. Sukthankar's edition; the following Adhyāya nos.are given int he colophon at the end of the parvan:— Dn_3 233; D_{4m} 250; D_5 33 (? for 233); T_1 237; $T_3G_{1.4\text{-}6}M$ 200; G_2 198; $G_3$203; Colophon śloka no.:—Dn_2 8449.

[2] Colophon Adhyāya no.: —$K_3$75; $D_3$73; $T_1$124; $G_{1.2}M$ 114; $G_{3.6}$120; $G_4$88; $G_6$118.

[3] ,, ,, ,, ,, : —Dn_1(marg.); 313; $Dn_3$314; $D_1$316.

[4] ,, ,, ,, ,, : —K_1D_3(as in text!) 67 (D_3 in words 9!); $B_4$70; $D_5$65; $D_6$69; $D_7$63; S77.

[5] ,, ,, ,, ,, : —$K_5$186; $D_6$85 (= 185); $T_2M_4$199; $T_2G_{1.2.5}M_{3.5}$200; $G_3$197 (as in text); $M_{1.2}$198.

	Gopal Narayan		Kumbhakonam^1		Kumbhakonam^2		Dravid Texts		Roy's Edition	
	A	S	A	S	A	S	A	S	A	S
1.	234	8619	260	10889	260	10996	260	11081	236	8476
2.	81	2712	103	4367	103	4377	103	4366	80	2695
3.	315	10494	315	12476	315	14081	315	12172	314	11801
4.	72	2272	78	3494	78	3575	78	3494	72	2295
5.	196	6559	196	6753	196	6752	196	6716	197	6621
6.	122	5969	122	5809	122	5908	122	5896	124	5715
7.	202	9572	203	10012	203	10127	203	9973	204	9509
8.	96	4964	101	4975	101	4986	101	4985	96	4799
9.	65	3618	66	3596	66	3594	66	3594	65	3497
10.	18	803	18	815	18	815	18	815	18	748
11.	27	825	27	807	27	807	27	807	27	803
12.	365	14938	375	15151	375	15153	375	15126	365	13625
13.	168	7639	272	11194	274	10983	274	11151	168	7637
14.	92	2736	118	4555	118	5443	118	4524	92	2849
15.	39	1088	41	1098	41	1098	41	1068	39	1081
16.	8	287	9	301	9	300	9	301	8	288
17.	3	110	3	111	3	111	3	111	3	109
18.	6	320	5	232	6	337	5	337	6	211

Part II: Ādiparvan

		Anuṣṭubh 4-Pādas		Anuṣṭubh 6-Pādas		Triṣṭubh 4-Pādas		Triṣṭubh 6-Pādas					
Adhyāya	Total Stanzas	Regular	Akṣaras	Regular	Akṣaras	Regular	Akṣaras	Regular	Akṣaras	Prose Akṣaras	Other Metres	Akṣaras	Total Akṣaras
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	210	141	4512 +3	9	432	60	2640 +80	...	...	45	...	...	7712
2	243	209	6688 +1	32	1536	2	88 +20	...	...	48	...	...	8381
Samāptam Parva-Saṃgraha-Parva													
3	195	24	768 +1	1	48	18	792 +22	...	...	30 +5725	...	...	7386
Samāptam Pauṣya-Parva													
4	11	8	256	...	...	...	...	...	...	23 +132	...	...	411
5	26	24	768	2	96	...	...	...	...	40	...	...	904
6	13	10	320 +1	3	144	...	...	...	...	32	...	...	497
7	26	21	672	5	240	...	...	...	...	23	...	...	935
8	22	21	672	1	48	...	...	...	...	23	...	...	743
9	22	22	704	...	...	...	...	...	...	64	...	...	768
10	8	8	256	...	...	...	...	...	...	45	...	...	301
11	17	16	512 +1	1	48	...	...	...	...	25	...	...	586
12	5	5	160	...	...	...	...	...	...	41	...	...	201
Samāptam Pauloma-Parva													

1	2	3	4	5	6	7	8	9	10	11	12	13	14
13	45	44	1408 +1	1	48	...	...	...	...	81	...	...	1538
14	23	21	672	2	96	...	...	...	...	30	...	...	798
15	13	13	416	...	...	...	...	...	...	35	...	...	451
16	40	38	1216	2	96 +1	...	...	...	...	33	...	...	1346
17	30	19	608	...	...	11	484 +82	...	...	24	...	...	1198
18	11	10	320 +1	1	48	...	...	...	...	39	...	...	408
19	17	15	480 +1	...	...	2	88 +16	...	...	25	...	...	610
20	15	11	352 +1	...	...	4	176 +20	...	...	32	...	...	581
21	17	13	416	1	48	3	132 +24	...	...	24	...	...	644
22	5	5	160	...	...	...	...	...	...	23	...	...	183
23	12	11	352	1	48	...	...	...	...	34	...	...	434
24	14	9	288	...	...	5	220 +26	...	...	45	...	...	579
25	33	30	960	2	96	1	44 +8	...	...	46	...	...	1154
26	47	42	1344	3	144	2	88 +5	...	...	35	...	...	1616
27	35	35	1120 +1	...	...	...	...	...	...	30	...	...	1151
28	25	22	704	1	48	2	88 +1	...	...	24	...	...	865
29	23	23	736	...	...	...	...	...	...	24	...	...	760
30	22	19	608	1	48 +1	2	88 +11	...	...	44	...	...	800
31	18	17	544 +2	1	48	...	...	...	...	30	...	...	624
32	25	20	640 +1	...	...	5	220 +13	...	...	70	...	...	944
33	31	29	928 +2	2	96	...	...	...	...	35	...	...	1061
34	18	17	544 +1	1	48	...	...	...	...	47	...	...	640
35	13	13	416	...	...	...	...	...	...	33	...	...	449
36	26	22	704	3	144	1	44	...	...	34	...	...	926
37	27	27	864	...	...	...	...	...	...	52	...	...	916
38	39	36	1152	3	144	...	...	...	...	52	...	...	1348

1	2	3	4	5	6	7	8	9	10	11	12	13	14
39	33	30	960	3	144	...	...	...	...	67	...	...	1171
40	11	3	96	...	...	8	352 +32	...	...	24	...	...	504
41	30	26	832	4	192 +1	...	...	...	...	31	...	...	1056
42	20	20	640	...	...	...	...	...	...	42	...	...	682
43	39	33	1056	6	288	...	...	...	...	25	...	...	1369
44	22	22	704 +1	...	...	...	...	...	...	26	...	...	731
45	28	23	736	4	192	1	44	...	...	58	...	...	1030
46	41	35	1120	6	288	...	...	...	...	60	...	...	1468
47	25	21	672 +1	4	192	...	...	...	...	36	...	...	901
48	26	26	832 +1	...	...	...	...	...	...	32	...	...	865
49	28	25	800 +3	3	144	...	...	...	...	72	...	...	1019
50	17	...	...	...	...	17	748 +12	...	...	31	...	...	791
51	23	12	384	...	...	11	484 +11	...	...	87	...	...	966
52	22	22	704	...	...	...	...	...	...	32	...	...	736
53	36	32	1024 +1	...	...	4	176 +1	...	...	83	...	...	1285

Samāptam Āstika-Parva

1	2	3	4	5	6	7	8	9	10	11	12	13	14
54	24	24	768 +2	...	...	...	...	...	...	27	...	...	797
55	43	42	1344	1	48	...	...	...	...	30	...	...	1422
56	33	33	1056	...	...	...	...	...	...	37	...	...	1093
57	106	85	2720	21	1008	...	...	...	...	43	...	...	3771
58	51	46	1472	5	240	...	...	...	...	38	...	...	1750
59	54	49	1568 +1	4	192	1	44 +4	...	...	46	...	...	1855
60	69	61	1952 +1	8	384 +1	...	...	...	...	27	...	...	2365
61	102	100	3200	2	96	...	...	...	...	50	...	...	3346

Samāptam Ādivaṃśāvataraṇa-Parva

1	2	3	4	5	6	7	8	9	10	11	12	13	14
62	14	14	448	...	...	...	...	...	...	36	...	...	484
63	26	25	800	1	48	...	...	...	...	28	...	...	876
64	42	34	1088 +1	7	336	1	44 +4	...	...	29	...	...	1502
65	42	38	1216	...	...	4	176 +2	...	...	60	...	...	1454
66	17	15	480	2	96	...	...	...	...	26	...	...	602
67	33	31	992	2	96	...	...	...	...	66	...	...	1154
68	80	76	2432	2	96	2	88	...	...	35	...	...	2651
69	51	46	1472	5	240	...	...	...	...	37	...	...	1749
70	46	42	1344 +1	4	192	...	...	...	...	28	...	...	1565
71	58	30	960 +1	7	336	19	836 +12	1	66	125	*	16	2352
72	23	22	704	1	48	...	...	...	...	64	...	...	816
73	36	35	1120	1	48	...	...	...	...	87	...	...	1255
74	12	11	352	1	48	...	...	...	...	33	...	...	433
75	25	23	736	2	96	...	...	...	...	121	...	...	953
76	35	33	1056	2	96	...	...	...	...	163	...	...	1315
77	27	25	800	...	...	2	88 +1	...	...	71	...	...	960
78	41	39	1248 +1	2	96	...	...	...	...	125	...	...	1470
79	30	29	928	1	48	...	...	...	...	97	...	...	1073
80	27	25	800 +1	2	96	...	...	...	...	48	...	...	945
81	16	14	448	2	96	...	...	...	...	45	...	...	589
82	13	7	224	...	...	6	264 +3	...	...	39	...	...	530
83	13	2	64	...	...	11	484 +4	...	...	55	...	...	607
84	21	...	...	...	...	21	924 +12	...	...	52	...	...	988

1	2	3	4	5	6	7	8	9	10	11	12	13	14
85	27	1	32	...	...	26	1144 +4	...	...	105	...	...	1285
86	17	9	288	1	48	7	308 +3	...	...	57	...	...	704
87	18	3	96	...	...	13	572 +12	1	66	74	†	22	842
88	26	9	288	...	...	14	616 +7	3	198+2	154	...	...	1265
89	55	43	1376 +1	12	576 +1	...	...	...	...	39	...	...	1993
90	96	12	384	...	...	...	...	...	...	36 +2445	...	...	2865
91	22	22	704	...	...	...	...	...	...	61	...	...	765
92	55	53	1696 +1	2	96	...	...	...	...	61	...	...	1854
93	46	40	1280	6	288	...	...	...	...	35	...	...	1603

Indicates *anuṣṭubh* stanza of 2 pādas

† Indicates *triṣṭubh* stanza of 2 pādas

1	2	3	4	5	6	7	8	9	10	11	12	13	14
94	94	87	2784+2	7	336 +1	...	...	...	...	76	...	...	3199
95	14	13	416	1	48	...	...	...	...	30	...	...	494
96	59	52	1664	7	336	...	...	...	...	29	...	...	2029
97	26	26	832	...	...	...	...	...	...	30	...	...	862
98	33	31	992	2	96	...	...	...	...	27	...	...	1115
99	49	44	1408	5	240	...	...	...	...	59	...	...	1707
100	30	26	832	4	192	...	...	...	...	27	...	...	1051
101	28	21	672	7	336 +1	...	...	...	...	60	...	...	1069
102	23	19	608	4	192	...	...	...	...	30	...	...	830
103	17	14	448	3	144	...	...	...	...	41	...	...	633
104	21	19	608	2	96	...	...	...	...	32	...	...	736
105	27	24	768	3	144	...	...	...	...	31	...	...	943
106	14	13	416	1	48	...	...	...	...	31	...	...	495
107	37	36	1152	1	48	...	...	...	...	60	...	...	1260

1	2	3	4	5	6	7	8	9	10	11	12	13	14
108	18	18	576 +2	...	...	...	...	...	...	39	...	...	617
109	31	25	800	6	288	...	...	...	...	72	...	...	1160
110	45	40	1280	5	240	...	...	...	...	57	...	...	1577
111	36	35	1120	1	48	...	...	...	...	51	...	...	1219
112	34	32	1024	2	96	...	...	...	...	32	...	...	1152
113	43	41	1312	2	96	...	...	...	...	46	...	...	1454
114	66	61	1952	4	192	1	44	...	...	33	...	...	2221
115	28	26	832	2	96	...	...	...	...	46	...	...	974
116	31	31	992	...	...	...	...	...	...	52	...	...	1044
117	33	33	1056	...	...	...	...	...	...	33	...	...	1089
118	30	28	896	2	96	...	...	...	...	40	...	...	1032
119	43	40	1280	3	144	...	...	...	...	35	...	...	1459
120	21	18	576	3	144	...	...	...	...	40	...	...	760
121	23	21	672	2	96	...	...	...	...	52	...	...	820
122	47	43	1376 +1	4	192	...	...	...	...	60	...	...	1629
123	78	72	2304	6	288	...	...	...	...	70	...	...	2662
Samāptaṃ Saṃbhava-Parva													
124	33	30	960	3	144	...	...	...	...	34	...	...	1138
125	32	31	992	...	...	1	44 +4	...	...	55	...	...	1095
126	39	36	1152	3	144	...	...	...	...	81	...	...	1377
127	24	22	704	1	48	1	44 +4	...	...	34	...	...	834
128	18	16	512	2	96	...	...	...	...	48	...	...	656
129	18	18	576	...	...	...	...	...	...	35	...	...	611
130	20	20	640	...	...	...	...	...	...	53	...	...	693

1	2	3	4	5	6	7	8	9	10	11	12	13	14
131	18	18	576	...	...	...	...	...	...	34	...	...	610
132	19	19	608	...	...	...	...	...	...	33	...	...	641
133	30	26	832	4	192	...	...	...	...	49	...	...	1073
134	28	25	800	3	144	...	...	...	...	46	...	...	990
135	21	21	672	...	...	...	...	...	...	34	...	...	706
136	19	18	576	1	48	...	...	...	...	45	...	...	669
137	23	23	736	...	...	...	...	...	...	34	...	...	770
138	31	30	960	1	48	...	...	...	...	45	...	...	1053
Samāptaṃ Jatugṛhadāha-Parva													
139	32	31	992	1	48	...	...	...	...	52	...	...	1092
140	21	21	672	...	...	...	...	...	...	52	...	...	724
141	24	23	736	1	48	...	...	...	...	50	...	...	834
142	34	34	1088	...	...	...	...	...	...	96	...	...	1184
Samāptaṃ Hiḍimbha-Vadha-Parva													
143	38	38	1216	...	...	...	...	...	...	62	...	...	1278
144	20	20	640	...	...	...	...	...	...	49	...	...	689
145	40	37	1184	3	144	...	...	...	...	63	...	...	1391
146	36	36	1152	...	...	...	...	...	...	40	...	...	1192
147	24	24	768	...	...	...	...	...	...	36	...	...	804
148	16	14	448	2	96	...	...	...	...	38	...	...	582
149	20	20	640	...	...	...	...	...	...	50	...	...	690
150	27	25	800	2	96	...	...	...	...	55	...	...	951
151	24	24	768	...	...	...	...	...	...	33	...	...	803
152	19	19	608	...	...	...	...	...	...	43	...	...	651

Samāptaṃ Baka-Vadha-Parva

1	2	3	4	5	6	7	8	9	10	11	12	13	14
153	12	12	384	...	...	...	...	...	...	42	...	...	426
154	25	25	800	...	...	...	...	...	...	72	...	...	872
155	52	46	1472 +2	6	288	...	...	...	...	48	...	...	1810
156	11	11	352	...	...	...	...	...	...	49	...	...	401
157	16	16	512	...	...	...	...	...	...	35	...	...	547
158	55	55	1760	...	...	...	...	...	...	105	...	...	1865
159	22	21	672	1	48	...	...	...	...	38	...	...	758
160	41	41	1312	...	...	...	...	...	...	43	...	...	1355
161	20	20	640	...	...	...	...	...	...	36	...	...	676
162	18	17	544	1	48	...	...	...	...	30	...	...	622
163	23	21	672	2	96	...	...	...	...	36	...	...	804
164	14	14	448	...	...	...	...	...	...	39	...	...	487
165	44	41	1312	3	144	...	...	...	...	106	...	...	1562
166	45	44	1408	1	48	...	...	...	...	30	...	...	1486
167	21	19	608	2	96	...	...	...	...	49	...	...	753
168	25	25	800	...	...	...	...	...	...	53	...	...	853
169	25	21	672	4	192	...	...	...	...	39	...	...	903
170	21	20	640	1	48	...	...	...	...	35	...	...	723
171	23	23	736	...	...	...	...	...	...	42	...	...	778
172	17	14	448	3	144	...	...	...	...	31	...	...	623
173	24	20	640	4	192	...	...	...	...	46	...	...	878

Samāptam Caitraratha-Parva

1	2	3	4	5	6	7	8	9	10	11	12	13	14
174	12	12	384	...	...	...	...	...	...	46	...	...	430
175	20	20	640	...	...	...	...	...	...	53	...	...	693
176	36	32	1024	1	48	3	132	...	...	47	...	...	1251
177	22	20	640	2	96	...	...	...	...	33	...	...	769
178	18	...	...	...	...	18	792	...	...	34	...	...	826
179	23	18	576	...	...	5	220	...	...	34	...	...	830
180	22	12	384	1	48	9	396	...	...	32	...	...	860
181	40	36	1152	3	144	1	44	...	...	46	...	...	1386
182	15	5	160	...	...	10	440	...	...	46	...	...	646
183	9	...	...	...	...	8	352	1	66+1	32	...	...	451
184	18	2	64	...	...	16	704 −1	...	...	34	...	...	801
185	28	...	...	...	...	27	1188	1	66	33	...	...	1287
186	15	...	...	...	...	15	660	...	...	38	...	...	698
187	32	30	960	2	96	...	...	...	...	88	...	...	1144
188	22	22	704	...	...	...	...	...	...	75	...	...	779
189	49	9	288	2	96	36	1584 +26	2	132+1	92	...	...	2219
Samāptaṃ Draupadī-Svayaṃvara-parva													
190	18	...	...	...	...	18	792 +43	...	...	38	...	...	873
191	19	19	608	...	...	...	...	...	...	42	...	...	651
Samāptaṃ Vaivāhika-Parva													
192	29	27	864	2	96	...	...	...	...	48	...	...	1008
193	19	19	608	...	...	...	...	...	...	39	...	...	647
194	25	24	768	1	48	...	...	...	...	39	...	...	855

1	2	3	4	5	6	7	8	9	10	11	12	13	14
195	19	18	576	...	...	1	44 +2	...	...	31	...	...	653
196	28	28	896	...	...	...	...	...	...	40	...	...	936
197	29	28	896	1	48	...	...	...	...	32	...	...	976
198	25	24	768	1	48	...	...	...	...	52	...	...	868
Samāptam Vidurāgamana-Parva													
199	50	46	1472	4	192	...	...	...	...	82	...	...	1746
Samāptam Rājyalambha-Parva													
200	23	21	672	2	96	...	...	...	...	43	...	...	811
201	32	32	1024 +1	...	...	...	...	...	...	58	...	...	1083
202	27	27	864 +1	...	...	...	...	...	...	29	...	...	894
203	30	28	896	2	96	...	...	...	...	42	...	...	1034
204	30	28	896	2	96	...	...	...	...	39	...	...	1031
205	30	25	800	5	240	...	...	...	...	46	...	...	1086
206	34	33	1056	1	48	...	...	...	...	56	...	...	1160
207	23	20	640	3	144	...	...	...	...	32	...	...	816
208	21	18	576	3	144	...	...	...	...	49	...	...	769
209	24	23	736	1	48	...	...	...	...	54	...	...	838
210	21	21	672	...	...	...	...	...	...	44	...	...	716
Samāptam Arjuna-Vanavāsa-Parva													
211	25	25	800 +2	...	...	...	...	...	...	55	...	...	857
212	32	32	1024	...	...	...	...	...	...	44	...	...	1068
Samāptam Subhadrā-Haraṇa-Parva													

1	2	3	4	5	6	7	8	9	10	11	12	13	14
213	82	75	2400	7	336	...	...	...	...	45	...	...	2781
Samāptaṃ Haraṇahārika-Parva													
214	32	32	1024	...	...	...	...	...	...	49	...	...	1073
215	19	19	608	...	...	...	...	...	...	34	...	...	642
216	34	28	896	6	288	...	...	...	...	47	...	...	1231
217	22	22	704	...	...	...	...	...	...	46	...	...	750
218	50	49	1568	1	48	...	...	...	...	34	...	...	1650
219	40	36	1152	4	192	...	...	...	...	36	...	...	1380
220	32	28	896	4	192	...	...	...	...	68	...	...	1156
221	21	18	576	3	144	...	...	...	...	45	...	...	765
222	18	18	576	...	...	...	...	...	...	64	...	...	640
223	25	20	640	1	48	4	176 +3	...	...	108	...	...	975
224	32	32	1024	...	...	...	...	...	...	77	...	...	1101
225	19	19	608	...	...	...	...	...	...	57	...	...	665

Samāptaṃ Khāṇḍavadāha-Parva

TOTALS IN ĀDIPARVAN

	7196	6062	193984 +47	424	20352 +7	460	20240 +533	9	594+4	19032	2	38	254831

SABHĀPARVAN

		Anuṣṭubh 4-Pādas		Anuṣṭubh 6-Pādas		Triṣṭubh 4-Pādas		Triṣṭubh 6-Pādas					
Adhyāya	Total Stanzas	Regular	Akṣaras	Regular	Akṣaras	Regular	Akṣaras	Regular	Akṣaras	Prose Akṣaras	Other Metres	Akṣaras	Total Akṣaras
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	19	19	608	...	...	...	...	...	...	51	...	...	659
2	23	20	640 +1	3	144	...	...	...	...	26	...	...	811
3	34	29	928	5	240	...	...	...	...	26	...	...	1194
4	34	30	960 −1	3	144	1	44	...	...	26	...	...	1175
5	116	112	3584	2	96	2	88	...	...	73	...	...	3841
6	18	18	576	...	...	...	...	...	...	25	...	...	601
7	26	21	672 +1	5	240	...	...	...	...	24	...	...	937
8	38	37	1184	1	48	...	...	...	...	24	...	...	1256
9	25	25	800	...	...	...	...	...	...	24	...	...	824
10	23	22	704	1	48	...	...	...	...	24	...	...	776
11	73	71	2272 +1	2	96	...	...	...	...	53	...	...	2422

Samāptam Sabhā-Parva

1	2	3	4	5	6	7	8	9	10	11	12	13	14
12	40	38	1216	2	96	...	...	...	...	48	...	...	1360
13	68	67	2144	1	48	...	...	...	...	25	...	...	2217
14	20	19	608	1	48	...	...	...	...	36	...	...	692
15	16	16	512	...	...	...	...	...	...	34	...	...	546
16	51	50	1600	1	48	...	...	...	...	49	...	...	1697
17	27	25	800	2	96	...	...	...	...	36	...	...	932
Samāptaṃ Mantra-Parva													
18	30	29	928	1	48	...	...	...	...	34	...	...	1010
19	50	50	1600	...	...	...	...	...	...	35	...	...	1635
20	34	34	1088	...	...	...	...	...	...	46	...	...	1134
21	23	23	736	...	...	...	...	...	...	27	...	...	763
22	58	58	1856	...	...	...	...	...	...	37	...	...	1893
Samāptaṃ Jarāsaṁdhavadha-Parva													
23	26	25	800	1	48	...	...	...	...	56	...	...	904
24	27	26	832	1	48	...	...	...	...	27	...	...	907
25	20	20	640	...	...	...	...	...	...	27	...	...	667
26	16	16	512	...	...	...	...	...	...	26	...	...	538
27	28	25	800	3	144	...	...	...	...	27	...	...	971
28	55	52	1664	3	144	...	...	...	...	43	...	...	1851
29	19	18	576	1	48	...	...	...	...	37	...	...	661

Samāptaṃ Digvijaya-Parva

1	2	3	4	5	6	7	8	9	10	11	12	13	14
30	54	51	1632	3	144	...	...	...	...	40	...	...	1816
31	25	24	768	1	48	...	...	...	...	27	...	...	843
32	18	14	448	4	192	...	...	...	...	35	...	...	675
Samāptaṃ Rājasūya-Parva													
33	32	32	1024 +1	...	...	...	...	...	...	42	...	...	1067
34	23	22	704	1	48	...	...	...	...	26	...	...	778
35	29	28	896	1	48	...	...	...	...	32	...	...	976
36	15	15	480	...	...	...	...	...	...	37	...	...	517
Samāptaṃ Arghābhiharaṇa-Parva													
37	15	15	480	...	...	...	...	...	...	27	...	...	507
38	40	38	1216	2	96	...	...	...	...	26	...	...	1338
39	20	20	640	...	...	...	...	...	...	37	...	...	677
40	23	23	736	...	...	...	...	...	...	34	...	...	770
41	33	33	1056	...	...	...	...	...	...	49	...	...	1105
42	60	51	1632	9	432	...	...	...	...	39	...	...	2103
Samāptaṃ Śiśupālavadha-Parva													
43	36	36	1152	...	...	...	...	...	...	28	...	...	1180
44	22	22	704	...	...	...	...	...	...	60	...	...	764
45	58	57	1824	1	48	...	...	...	...	86	...	...	1958
46	35	34	1088	1	48	...	...	...	...	48	...	...	1184
47	31	29	928	2	96	...	...	...	...	28	...	...	1052
48	42	38	1216	4	192	...	...	...	...	28	...	...	1436

1	2	3	4	5	6	7	8	9	10	11	12	13	14
49	25	24	768	...	...	1	44	...	...	28	...	...	840
50	28	28	896	...	...	...	...	...	...	32	...	...	928
51	26	13	416	...	...	13	572 +5	...	...	83	...	...	1076
52	37	22	704 +1	...	...	15	660 +12	...	...	81	...	...	1458
53	25	23	736	...	...	2	88 +1	...	...	102	...	...	927
54	29	21	672	7	336	...	...	...	...	155	*	16	1179
55	17	16	512	1	48	...	...	...	...	26	...	...	586
56	10	2	64	...	...	8	352 +5	...	...	25	...	...	446
57	21	6	192	...	...	15	660 +16	...	...	33	...	...	901
58	43	34	1088	4	192	5	220 +5	...	...	233	...	...	1738
59	12	2	64	...	...	10	440 +1	...	...	35	...	...	540
60	47	5	160	2	96	40	1760 +6	...	...	110	...	...	2132
61	82	82	2624	...	...	...	...	...	...	90	...	...	2714
62	38	31	992	...	...	6	264	1	66	51	...	...	1373
63	36	18	576	...	...	18	792 +17	...	...	109	...	...	1494
64	17	17	544	...	...	...	...	...	...	53	...	...	597
65	17	17	544	...	...	...	...	...	...	50	...	...	594

Samāptaṃ Dyūta-Parva

1	2	3	4	5	6	7	8	9	10	11	12	13	14
66	37	36	1152	...	...	1	44	...	...	58	...	...	1254
67	21	21	672	...	...	...	...	...	...	85	...	...	757
68	46	34	1088	...	...	12	528 +10	...	...	73	...	...	1699
69	21	21	672	...	...	...	...	...	...	52	...	...	724
70	24	24	768 +1	...	...	...	...	...	...	28	...	...	797
71	47	46	1472 +2	1	48	...	...	...	...	56	...	...	1578
72	36	35	1120	1	48	...	...	...	...	65	...	...	1233
Samāptam Anudyūta-Parva													
TOTALS IN SABHĀPARVAN													
	2390	2155	68960 +9	84	4032	149	6556 +78	1	66	3468	1	16	83185

*Indicates *anuṣṭubh* stanza of 2 pādas.

VANAPARVAN

		Anuṣṭubh 4-Pādas		Anuṣṭubh 6-Pādas		Triṣṭubh 4-Pādas		Triṣṭubh 6-Pādas					
Adhyāya	Total Stanzas	Regular	Akṣaras	Regular	Akṣaras	Regular	Akṣaras	Regular	Akṣaras	Prose Akṣaras	Other Metres	Akṣaras	Total Akṣaras
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	43	37	1184	6	288	...	...	...	...	51	...	...	1523
2	79	73	2336	6	288	...	...	...	...	73	...	...	2697
3	33	29	928	1	48	3	132 –11	...	...	44	...	...	1163
4	10	8	256	2	96	...	...	...	...	28	...	...	380
5	20	...	...	...	...	18	792 +16	2	132+4	49	...	...	993
6	22	5	160	...	...	17	748 +11	...	...	33	...	...	952
7	24	24	768	...	...	...	...	...	...	42	...	...	810
8	23	23	736	...	...	...	...	...	...	54	...	...	790
9	12	12	384	...	...	...	...	...	...	25	...	...	409
10	23	22	704	1	48	...	...	...	...	59	...	...	811
11	39	38	1216	1	48	...	...	...	...	92	...	...	1356
Samāptaṃ Āraṇyaka-Parva													
12	75	71	2272	2	96	2	88	...	...	51	...	...	2507
Samāptaṃ Kirmīra-Vadha-Parva													

1	2	3	4	5	6	7	8	9	10	11	12	13	14
13	120	118	3776	2	96	...	...	...	...	58	...	...	3930
14	17	17	544 +1	...	...	...	...	...	...	28	...	...	573
15	22	22	704	...	...	...	...	...	...	33	...	...	737
16	23	23	736	...	...	...	...	...	...	34	...	...	770
17	33	33	1056 +1	...	...	...	...	...	...	28	...	...	1085
18	24	22	704	...	...	2	88	...	...	28	...	...	820
19	33	33	1056	...	...	...	...	...	...	41	...	...	1097
20	27	26	832	...	...	1	44	...	...	26	...	...	902
21	38	34	1088 +1	4	192	...	...	...	...	28	...	...	1309
22	30	26	832	1	48	3	132	...	...	27	...	...	1039
23	51	51	1632	...	...	...	...	...	...	36	...	...	1668
24	16	...	...	...	...	16	704	...	...	29	...	...	733
25	26	16	512	...	...	10	440 +4	...	...	50	...	...	1006
26	18	...	...	...	...	18	792 +3	...	...	43	...	...	838
27	25	21	672 +1	...	...	4	176 +4	...	...	29	...	...	882
28	37	35	1120	2	96	...	...	...	...	29	...	...	1245
29	35	33	1056	2	96	...	...	...	...	38	...	...	1190
30	50	46	1472	4	192	...	...	...	...	26	...	...	1690
31	42	42	1344	...	...	...	...	...	...	26	...	...	1370
32	40	39	1248	1	48	...	...	...	...	27	...	...	1323
33	58	53	1696 +1	5	240	...	...	...	...	26	...	...	1963
34	85	82	2624	3	144	...	...	...	...	29	...	...	2797
35	21	...	...	...	...	21	924 +11	...	...	28	...	...	963
36	34	34	1088	...	...	...	...	...	...	27	...	...	1115

1	2	3	4	5	6	7	8	9	10	11	12	13	14
37	41	39	1248	2	96	...	...	...	...	29	...	...	1373
38	45	34	1088	11	528	...	...	...	...	29	...	...	1645
39	30	23	736	7	336	...	...	...	...	55	...	...	1127
40	61	57	1824	4	192	...	...	...	...	57	...	...	2073
41	26	23	736 +1	1	48	2	88 +16	...	...	49	...	...	938
42	42	38	1216	4	192	...	...	...	...	38	...	...	1446
Samāptam Kairāta-Parva													
43	38	38	1216	...	...	...	...	...	...	44	...	...	1260
44	32	32	1024 +2	...	...	...	...	...	...	31	...	...	1057
45	38	38	1216	...	...	...	...	...	...	31	...	...	1247
46	41	40	1280	...	...	1	44	...	...	51	...	...	1375
47	12	10	320	...	...	2	88	...	...	39	...	...	447
48	41	37	1184	...	...	4	176 +1	...	...	44	...	...	1405
49	43	38	1216	5	240	...	...	...	...	68	...	...	1524
50	31	29	928	2	96	...	...	...	...	27	...	...	1051
51	29	29	928 +1	...	...	...	...	...	...	22	...	...	951
52	24	24	768	...	...	...	...	...	...	39	...	...	807
53	21	21	672	...	...	...	...	...	...	37	...	...	709
54	38	35	1120	3	144	...	...	...	...	29	...	...	1293
55	13	13	416	...	...	...	...	...	...	29	...	...	445
56	18	17	544	1	48	...	...	...	...	28	...	...	620
57	23	22	704	1	48	...	...	...	...	29	...	...	781
58	34	34	1088	...	...	...	...	...	...	40	...	...	1128
59	25	25	800	...	...	...	...	...	...	36	...	...	836

1	2	3	4	5	6	7	8	9	10	11	12	13	14
60	38	38	1216	...	...	...	...	...	...	28	...	...	1244
61	125	114	3648 +2	11	528	...	...	...	...	43	...	...	4221
62	43	35	1120	8	384	...	...	...	...	29	...	...	1533
63	24	22	704	2	96	...	...	...	...	29	...	...	829
64	19	19	608	...	...	...	...	...	...	44	...	...	652
65	37	34	1088	3	144	...	...	...	...	43	...	...	1275
66	26	22	704 +2	4	192	...	...	...	...	35	...	...	933
67	22	22	704	...	...	...	...	...	...	36	...	...	740
68	24	19	608	5	240	...	...	...	...	30	...	...	878
69	34	31	992	3	144	...	...	...	...	52	...	...	1188
70	39	33	1056	6	288	...	...	...	...	29	...	...	1373
71	34	33	1056	1	48	...	...	...	...	44	...	...	1148
72	30	30	960	...	...	...	...	...	...	81	...	...	1041
73	28	26	832	2	96	...	...	...	...	42	...	...	970
74	24	24	768	...	...	...	...	...	...	31	...	...	799
75	27	26	832	...	...	1	44	...	...	30	...	...	906
76	19	18	576	1	48	...	...	...	...	42	...	...	666
77	29	25	800	4	192	...	...	...	...	31	...	...	1023
78	23	21	672	2	96	...	...	...	...	39	...	...	807
79	29	28	896	1	48	...	...	...	...	66	...	...	1010

Samāptaṃ Indralokābhigamana-Parva

1	2	3	4	5	6	7	8	9	10	11	12	13	14
80	133	120	3840	13	624	...	...	...	...	53	...	...	4517
81	178	132	4224	44	2112 +1	1	44 +3	...	...	51	*	16	6451
82	143	123	3936	20	960	...	...	...	...	28	...	...	4924
83	114	111	3552	3	144	...	...	...	...	42	...	...	3738
84	20	17	544	3	144	...	...	...	...	32	...	...	720
85	23	19	608	4	192	...	...	...	...	31	...	...	831
86	24	24	768	...	...	...	...	...	...	28	...	...	796
87	15	13	416	2	96	...	...	...	...	28	...	...	540
88	30	30	960	...	...	...	...	...	...	28	...	...	988
89	22	20	...	2	96	...	...	...	...	33	...	...	769
90	24	24	768	...	...	...	...	...	...	58	...	...	826
91	28	25	800	3	144	...	...	...	...	32	...	...	976
92	22	21	672	1	48	...	...	...	...	36	...	...	756
93	27	27	864	...	...	...	...	...	...	31	...	...	895
94	27	27	864	...	...	...	...	...	...	38	...	...	902
95	24	24	768	...	...	...	...	...	...	60	...	...	828
96	20	20	640	...	...	...	...	...	...	65	...	...	705
97	27	23	736	4	192	...	...	...	...	66	...	...	994
98	24	17	544	2	96	5	220	...	...	37	...	...	897

*Indicates *anuṣṭubh* stanza of 2 pādas.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
99	21	11	352	...	...	10	440	...	...	30	...	...	822
100	24	21	672	3	144	...	...	...	...	27	...	...	843
101	17	16	512	1	48	...	...	...	...	38	...	...	598
102	23	17	544	3	144	3	132	...	...	47	...	...	867
103	19	14	448	2	96	3	132 +5	...	...	30	...	...	711
104	22	21	672	1	48	...	...	...	...	53	...	...	773
105	25	20	640	5	240	...	...	...	...	31	...	...	911
106	40	35	1120	5	240	...	...	...	...	56	...	...	1416
107	25	22	704	3	144	...	...	...	...	41	...	...	889
108	19	15	480	4	192	...	...	...	...	31	...	...	703
109	20	20	640	...	...	...	...	...	...	47	...	...	687
110	36	35	1120	1	48	...	...	...	...	44	...	...	1212
111	22	6	192	...	...	16	704 +3	...	...	61	...	...	960
112	18	...	...	...	...	18	792	...	...	33	...	...	825
113	25	...	...	...	...	25	1100 +2	...	...	40	...	...	1142
114	26	23	736	...	...	3	132	...	...	62	...	...	930
115	30	27	864	3	144	...	...	...	...	77	...	...	1085
116	29	29	928	...	...	...	...	...	...	34	...	...	962
117	18	18	576	...	...	...	...	...	...	48	...	...	624
118	23	...	...	...	...	23	1012	...	...	35	...	...	1047
119	22	4	128	...	...	18	792	...	...	45	...	...	965
120	30	...	...	...	...	29	1276	1	66	54	...	...	1396
121	23	21	672	2	96	...	...	...	...	55	...	...	823
122	27	24	768	3	144	...	...	...	...	33	...	...	945
123	23	20	640	3	144	...	...	...	...	34	...	...	818

1	2	3	4	5	6	7	8	9	10	11	12	13	14
124	24	22	704	2	96	...	...	...	...	56	...	...	856
125	23	20	640	3	144	...	...	...	...	34	...	...	818
126	43	40	1280	3	144	...	...	...	...	40	...	...	1464
127	21	21	672 +1	...	...	...	...	...	...	63	...	...	736
128	19	15	480	4	192	...	...	...	...	62	...	...	734
129	22	21	672 +1	1	48	...	...	...	...	49	...	...	770
130	20	20	640	...	...	...	...	...	...	32	...	...	672
131	32	30	960 +1	2	96	...	...	...	...	81	...	...	1138
132	20	...	...	...	...	19	836 +10	1	66	46	...	...	958
133	27	9	288 +2	...	...	18	792 +11	...	...	150	...	...	1243
134	39	6	192	...	...	32	1408 +34	...	...	178	†	22	1834
135	42	41	1312	...	...	1	44	...	...	104	...	...	1460
136	18	18	576	...	...	...	...	...	...	65	...	...	641
137	20	20	640	...	...	...	...	...	...	34	...	...	674
138	19	19	608	...	...	...	...	...	...	45	...	...	653
139	24	22	704	2	96	...	...	...	...	60	...	...	860
140	17	13	416	...	...	3	132	1	66	49	...	...	663
141	30	30	960	...	...	...	...	...	...	71	...	...	1031
142	28	28	896	...	...	...	...	...	...	36	...	...	932
143	21	19	608	2	96	...	...	...	...	37	...	...	741
144	27	25	800	2	96	...	...	...	...	67	...	...	963
145	43	40	1280	3	144	...	...	...	...	60	...	...	1484
146	81	73	2336	8	384	...	...	...	...	37	...	...	2757
147	41	38	1216	3	144	...	...	...	...	79	...	...	1439
148	39	36	1152	3	144	...	...	...	...	49	...	...	1345

† Indicates *triṣṭubh* stanza of 2 pādas.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
149	52	50	1600	2	96	...	...	...	...	43	...	...	1739
150	28	26	832	2	96	...	...	...	...	35	...	...	963
151	15	15	480	...	...	...	...	...	...	37	...	...	517
152	25	11	352	2	96	12	528	...	...	51	...	...	1027
153	31	29	928	2	96	...	...	...	...	45	...	...	1069
Samāptaṃ Tīrthayātrā-Parva													
154	61	54	1728	7	336	...	...	...	...	48	...	...	2112
Samāptaṃ Jaṭāsuravadha-Parva													
155	90	76	2432 +1	14	672	...	...	...	...	37	...	...	3142
156	31	30	960	1	48	...	...	...	...	36	...	...	1044
157	70	66	2112	4	192	...	...	...	...	45	...	...	2349
158	59	52	1664	7	336	...	...	...	...	51	...	...	2051
159	35	32	1024	3	144	...	...	...	...	43	...	...	1211
160	37	37	1184	...	...	...	...	...	...	33	...	...	1217
161	29	...	...	...	...	28	1232 +2	1	66	35	...	...	1335
162	16	15	480	...	...	1	44	...	...	34	...	...	558
163	53	47	1504	6	288 +1	...	...	...	...	40	...	...	1833
164	58	56	1792	2	96	...	...	...	...	55	...	...	1943
165	23	19	608	4	192	...	...	...	...	33	...	...	833
166	23	22	704	1	48	...	...	...	...	32	...	...	784
167	28	26	832	2	96	...	...	...	...	33	...	...	961
168	30	30	960	...	...	...	...	...	...	33	...	...	993
169	35	35	1120	...	...	...	...	...	...	47	...	...	1167

1	2	3	4	5	6	7	8	9	10	11	12	13	14
170	69	57	1824	12	576	...	...	...	...	44	...	...	2444
171	17	17	544	...	...	...	...	...	...	55	...	...	599
172	24	23	736	1	48 +1	...	...	...	...	44	...	...	829
Samāptaṃ Yakṣayuddha-Parva													
173	22	...	...	...	...	21	924	1	66	43	...	...	1033
174	24	...	...	...	...	24	1056	...	...	36	...	...	1092
175	21	21	672	...	...	...	...	...	...	44	...	...	716
176	51	51	1632 +1	...	...	...	...	...	...	35	...	...	1668
177	33	32	1024	1	48	...	...	...	...	96	...	...	1168
178	50	50	1600	...	...	...	...	...	...	117	...	...	1717
Samāptaṃ Ajagara-Parva													
179	18	18	576	...	...	...	...	...	...	36	...	...	612
180	49	22	704	1	48	25	1100	1	66	42	...	...	1960
181	41	31	992	3	144	7	308	...	...	42	...	...	1486
182	21	17	544	4	192	...	...	...	...	34	...	...	770
183	32	23	736	9	432	...	...	...	...	73	...	...	1241
184	25	3	96	...	...	22	968 +5	...	...	97	...	...	1166
185	54	48	1536 +1	6	288	...	...	...	...	42	...	...	1867
186	129	115	3680	14	672	...	...	...	...	42	...	...	4394
187	55	54	1728	1	48	...	...	...	...	39	...	...	1815
188	93	84	2688	9	432	...	...	...	...	42	...	...	3162
189	31	26	832	5	240	...	...	...	...	66	...	...	1138

1	2	3	4	5	6	7	8	9	10	11	12	13	14
190	82	2	64	. . .	. . .	21	924 +18	1	66+1	114 +1758	†	22	2967
191	28	3	96	. . .	. . .	. . .	. . .	. . .	. . .	8 +941	. . .	. . .	1045
192	29	22	704	6	288	. . .	. . .	. . .	. . .	72	*	16	1080
193	27	19	608	8	384	. . .	. . .	. . .	. . .	40	. . .	. . .	1032
194	30	20	640	9	432	. . .	. . .	. . .	. . .	78	*	16	1166
195	39	29	928	10	480	. . .	. . .	. . .	. . .	35	. . .	. . .	1443
196	21	16	512	5	240	. . .	. . .	. . .	. . .	42	. . .	. . .	794
197	44	38	1216	6	288	. . .	. . .	. . .	. . .	70	. . .	. . .	1574
198	94	80	2560 +1	13	624	1	44	. . .	. . .	64	. . .	. . .	3293
199	34	24	768	10	480	. . .	. . .	. . .	. . .	32	. . .	. . .	1280
200	54	48	1536	3	144	3	132	. . .	. . .	57	. . .	. . .	1869
201	20	17	544	3	144	. . .	. . .	. . .	. . .	49	. . .	. . .	737
202	25	21	672	3	144	1	44	. . .	. . .	43	. . .	. . .	903
203	51	47	1504	3	144	1	44	. . .	. . .	61	. . .	. . .	1753
204	27	23	736	4	192	. . .	. . .	. . .	. . .	70	. . .	. . .	998
205	29	23	736	6	288	. . .	. . .	. . .	. . .	66	. . .	. . .	1090
206	34	29	928	5	240	. . .	. . .	. . .	. . .	72	. . .	. . .	1240
207	20	18	576	2	96	. . .	. . .	. . .	. . .	66	. . .	. . .	738
208	8	8	256	. . .	. . .	. . .	. . .	. . .	. . .	33	. . .	. . .	289
209	25	24	768 +1	1	48	. . .	. . .	. . .	. . .	33	. . .	. . .	850
210	19	18	576	1	48	. . .	. . .	. . .	. . .	33	. . .	. . .	657
211	31	29	928	2	96	. . .	. . .	. . .	. . .	35	. . .	. . .	1059
212	30	26	832 +1	4	192	. . .	. . .	. . .	. . .	34	. . .	. . .	1059

*Indicates *anuṣṭubh* stanza of 2 pādas

† Indicates *triṣṭubh* stanza of 2 pādas.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
213	52	45	1440	7	336	...	...	...	...	86	...	...	1862
214	37	32	1024	5	240	...	...	...	...	51	...	...	1315
215	23	18	576	5	240	...	...	...	...	35	...	...	851
216	15	9	288	6	288	...	...	...	...	34	...	...	610
217	14	12	384	2	96	...	...	...	...	47	...	...	527
218	49	46	1472	3	144	...	...	...	...	82	...	...	1698
219	58	55	1760	3	144	...	...	...	...	103	...	...	2007
220	27	26	832	1	48	...	...	...	...	50	...	...	930
221	80	70	2240	10	480	...	...	...	...	65	...	...	2785
Samāptaṃ Mārkaṇḍeyasamāsyā-Parva													
222	59	55	1760	4	192	...	...	...	...	36	...	...	1988
223	12	...	...	...	...	12	528	...	...	34	...	...	562
224	17	15	480	2	96	...	...	...	...	52	...	...	628
Samāptaṃ Draupadī-Satyabhāmā-Saṃvāda-Parva													
225	31	...	...	...	...	31	1364	...	...	45	...	...	1409
226	22	20	640	2	96	...	...	...	...	36	...	...	772
227	24	24	768	...	...	...	...	...	...	37	...	...	805
228	29	29	928	...	...	...	...	...	...	58	...	...	986
229	29	27	864	2	96	...	...	...	...	38	...	...	998
230	31	28	896	3	144	...	...	...	...	35	...	...	1075
231	21	20	640 +1	1	48 +1	...	...	...	...	37	...	...	727
232	21	21	672	...	...	...	...	...	...	57	...	...	729
233	21	21	672 +1	...	...	...	...	...	...	37	...	...	710

1	2	3	4	5	6	7	8	9	10	11	12	13	14
234	28	26	832 +1	2	96	...	...	...	...	37	...	...	966
235	25	25	800	...	...	...	...	...	...	65	...	...	865
236	15	13	416	2	96	...	...	...	...	44	...	...	556
237	15	12	384	3	144	...	...	...	...	36	...	...	564
238	49	39	1248	10	480	...	...	...	...	52	...	...	1780
239	26	17	544	9	432	...	...	...	...	40	...	...	1016
240	47	36	1152	11	528	...	...	...	...	42	...	...	1722
241	37	33	1056	4	192	...	...	...	...	60	...	...	1308
242	24	19	608	5	240	...	...	...	...	38	...	...	886
243	24	18	576 +1	6	288	...	...	...	...	47	...	...	912
Samāptam Ghoṣayātrā-Parva													
244	16	14	448	2	96	...	...	...	...	58	...	...	602
Samāptam Mṛgasvapnabhaya-Parva													
245	34	32	1024	2	96	...	...	...	...	51	...	...	1171
246	36	36	1152 +2	...	...	...	...	...	...	42	...	...	1196
247.	47	47	1504	...	...	...	...	...	...	61	...	...	1565
Samāptam Vrīhidrauṇika-Parva													
248	17	17	544	...	...	...	...	...	...	39	...	...	583
249	13	...	...	...	...	12	528	1	66	38	...	...	632
250	9	...	...	...	...	9	396	...	...	36	...	...	432
251	21	21	672	...	...	...	...	...	...	73	...	...	745
252	27	3	96	...	...	23	1012 +10	1	66+1	70	...	...	1255
253	26	...	...	...	...	21	924 +9	5	330+6	52	...	...	1321
254	21	1	32	...	...	19	836 +10	1	66+2	51	...	...	997

1	2	3	4	5	6	7	8	9	10	11	12	13	14
255	59	56	1792	3	144	...	...	...	...	67	...	...	2003
256	30	29	928	1	48	...	...	...	...	44	...	...	1020
257	10	8	256	2	96	...	...	...	...	46	...	...	398
258	16	16	512	...	...	...	...	...	...	51	...	...	563
259	40	40	1280	...	...	...	...	...	...	75	...	...	1355
260	15	13	416	2	96	...	...	...	...	49	...	...	561
261	55	55	1760	...	...	...	...	...	...	53	...	...	1813
262	41	39	1248	2	96	...	...	...	...	34	...	...	1378
263	43	39	1248	4	192	...	...	...	...	34	...	...	1474
264	73	71	2272	2	96	...	...	...	...	35	...	...	2403
265	30	29	928	1	48	...	...	...	...	35	...	...	1011
266	68	62	1984	6	288	...	...	...	...	34	...	...	2306
267	54	54	1728	...	...	...	...	...	...	35	...	...	1763
268	40	40	1280	...	...	...	...	...	...	35	...	...	1315
269	14	14	448	...	...	...	...	...	...	37	...	...	485
270	29	28	896	1	48	...	...	...	...	34	...	...	978
271	27	25	800	2	96	...	...	...	...	36	...	...	932
272	26	25	800	1	48	...	...	...	...	35	...	...	883
273	33	33	1056	...	...	...	...	...	...	35	...	...	1091
274	31	30	960	1	48	...	...	...	...	42	...	...	1050
275	69	69	2208 +1	...	...	...	...	...	...	75	...	...	2284
276	13	11	352	2	96	...	...	...	...	43	...	...	491
277	41	40	1280	1	48	...	...	...	...	73	...	...	1401
278	32	32	1024	...	...	...	...	...	...	130	...	...	1154
279	23	21	672	...	...	2	88 +8	...	...	71	...	...	839

1	2	3	4	5	6	7	8	9	10	11	12	13	14
280	33	33	1056 +1	...	...	...	...	...	...	109	...	...	1166
281	108	75	2400	6	288	26	1144 +86	...	...	219	*	16	4153
282	44	42	1344	...	...	2	88 +8	...	...	127	...	...	1567
283	16	16	512	...	...	...	...	...	...	53	...	...	565
Samāptaṃ Draupadī-Haraṇa-Parva													
284	39	39	1248	...	...	...	...	...	...	61	...	...	1309
285	17	14	448	3	144	...	...	...	...	33	...	...	625
286	20	18	576	2	96	...	...	...	...	46	...	...	718
287	29	29	928	...	...	...	...	...	...	44	...	...	972
288	19	19	608	...	...	...	...	...	...	44	...	...	652
289	23	23	736	...	...	...	...	...	...	56	...	...	792
290	26	21	672	1	48	4	176	...	...	57	...	...	953
291	28	26	832	...	...	2	88	...	...	89	...	...	1009
292	27	27	864	...	...	...	...	...	...	36	...	...	900
293	23	21	672	2	96	...	...	...	...	36	...	...	804
294	43	35	1120	...	...	8	352	...	...	142	...	...	1614
Samāptaṃ Kuṇḍalā-Haraṇa-Parva													

*Indicates *anuṣṭubh* stanza of 2 pādas

1	2	3	4	5	6	7	8	9	10	11	12	13	14
295	17	16	512	...	...	1	44	...	...	45	...	...	601
296	43	40	1280	3	144	...	...	...	...	87	...	...	1511
297	74	70	2240 +10	3	144	1	44 +1	...	...	331	...	...	2770
298	28	26	832	...	...	2	88 +8	...	...	104	...	...	1032
299	29	25	800	4	192	...	...	...	...	51	...	...	1043

Samāptaṃ Āraṇeya-Parva

TOTALS IN VANAPARVAN

	10316	8806	281792 +42	711	34128 +4	694	30532 +310	17	1122+14	17423	6	108	365479

		Anuṣṭubh 4-Pādas		Anuṣṭubh 6-Pādas		Triṣṭubh 4-Pādas		Triṣṭubh 6-Pādas					
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	23	22	704	1	48	...	...	...	...	61	...	...	813
2	27	24	768	3	144	...	...	...	...	37	...	...	949
3	19	19	608	...	...	...	...	...	...	65	...	...	673
4	49	48	1536	1	48	...	...	...	...	46	...	...	1630
5	31	29	928	2	96	...	...	...	...	56	...	...	1080
6	16	...	...	...	...	15	660 +59	1	66+6	52	...	...	843
7	11	...	...	...	...	11	484 +44	...	...	52	...	...	580
8	33	32	1024 +1	1	48	...	...	...	...	60	...	...	1133
9	15	8	256	...	...	7	308 +18	...	...	54	...	...	636
10	13	...	...	...	...	13	572 +47	...	...	47	...	...	666
11	13	2	64	...	...	11	484 +44	...	...	54	...	...	646
12	32	31	992	1	48	...	...	...	...	43	...	...	1083

Samāptaṃ Vairāṭa-Parva

1	2	3	4	5	6	7	8	9	10	11	12	13	14
13	21	11	352	1	48	9	396 +35	...	...	33	...	...	864
14	21	19	608	1	48	...	...	...	...	64	*	16	736
15	41	37	1184	3	144	...	...	...	...	109	*	16	1453
16	16	12	384	4	192	...	...	...	...	27	...	...	603
17	29	29	928	...	...	...	...	...	...	25	...	...	953
18	36	35	1120	1	48	...	...	...	...	25	...	...	1193
19	30	27	864	2	96	...	...	...	...	47	*	16	1023
20	34	30	960	4	192	...	...	...	...	38	...	...	1190
21	67	66	2112	1	48	...	...	...	...	101	...	...	2261
22	30	26	832	4	192	...	...	...	...	55	...	...	1079
23	28	28	896	...	...	...	...	...	...	87	...	...	983
						Samāptaṁ Kīcakavadha-Parva							
24	21	20	640	1	48	...	...	...	...	28	...	...	716
25	17	16	512	1	48	...	...	...	...	28	...	...	588
26	10	10	320	...	...	...	...	...	...	27	...	...	347
27	28	25	800	3	144	...	...	...	...	28	...	...	972
28	14	14	448	...	...	...	...	...	...	28	...	...	476
29	28	28	896	...	...	...	...	...	...	29	...	...	925
30	30	23	736	7	336	...	...	...	...	26	...	...	1098
31	24	23	736	1	48	...	...	...	...	28	...	...	812
32	50	42	1344	6	288	2	88	...	...	56	...	...	1776
33	21	21	672	...	...	...	...	...	...	28	...	...	700
34	19	19	608	...	...	...	...	...	...	34	...	...	642

*Indicates *anuṣṭubh* stanza of 2 pādas

1	2	3	4	5	6	7	8	9	10	11	12	13	14
35	26	26	832	...	...	...	...	...	...	42	...	...	874
36	47	40	1280	7	336	...	...	...	...	77	...	...	1693
37	16	16	512	...	...	...	...	...	...	48	...	...	560
38	58	57	1824	1	48	...	...	...	...	60	...	...	1932
39	23	20	640	3	144	...	...	...	...	67	...	...	851
40	27	26	832	1	48	...	...	...	...	58	...	...	938
41	23	18	576	5	240	...	...	...	...	55	...	...	871
42	31	30	960	1	48	...	...	...	...	29	...	...	1037
43	21	21	672	...	...	...	...	...	...	26	...	...	698
44	22	20	640	2	96	...	...	...	...	27	...	...	763
45	26	25	800	1	48	...	...	...	...	28	...	...	879
46	18	17	544	1	48	...	...	...	...	45	...	...	637
47	19	17	544	2	96	...	...	...	...	39	...	...	679
48	23	21	672	2	96	...	...	...	...	44	...	...	812
49	23	...	...	...	...	22	968	1	66	30	...	...	1064
50	23	23	736	...	...	...	...	...	...	33	...	...	769
51	17	16	512	1	48	...	...	...	...	29	...	...	589
52	28	23	736	5	240	...	...	...	...	28	...	...	1004
53	69	62	1984 +1	7	336	...	...	...	...	34	...	...	2355
54	20	19	608	1	48	...	...	...	...	29	...	...	685
55	25	25	800	...	...	...	...	...	...	46	...	...	846
56	28	24	768	4	192	...	...	...	...	28	...	...	988
57	19	17	544	2	96	...	...	...	...	29	...	...	669
58	13	12	384	1	48	...	...	...	...	29	...	...	461
59	44	40	1280	4	192	...	...	...	...	31	...	...	1503

1	2	3	4	5	6	7	8	9	10	11	12	13	14
60	19	...	...	...	...	19	836	...	...	34	...	...	870
61	29	...	...	...	...	29	1276	...	...	30	...	...	1306
62	11	11	352	...	...	...	...	...	...	60	...	...	412
Samāptaṃ Gograhaṇa-Parva													
63	54	45	1440 +1	3	144	6	264 +1	...	...	82	...	...	1932
64	37	35	1120	2	96	...	...	...	...	76	...	...	1292
65	21	20	640	1	48	...	...	...	...	30	...	...	718
66	29	27	864	1	48	1	44	...	...	61	...	...	1017
67	38	35	1120	3	144	...	...	...	...	65	...	...	1329
Samāptaṃ Vaivāhika-Parva													
Totals in Virāṭaparvan													
	1824	1564	50048 +3	110	5280	145	6380 +248	2	132+6	3007	3	48	65152

UDYOGAPARVAN

		Anuṣṭubh 4-Pādas		Anuṣṭubh 6-Pādas		Triṣṭubh 4-Pādas		Triṣṭubh 6-Pādas					
Adhyāya	Total Stanzas	Regular	Akṣaras	Regular	Akṣaras	Regular	Akṣaras	Regular	Akṣaras	Prose Akṣaras	Other Metres	Akṣaras	Total Akṣaras
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	25	...	...	...	...	25	1100	...	...	32	...	...	1132
2	13	...	...	...	...	13	572	...	...	34	...	...	606
3	23	23	736	...	...	...	...	...	...	25	...	...	761
4	27	27	864	...	...	...	...	...	...	25	...	...	889
5	18	18	576	...	...	...	...	...	...	34	...	...	610
6	18	18	576	...	...	...	...	...	...	32	...	...	608
7	36	35	1120	1	48	...	...	...	...	61	...	...	1229
8	37	31	992	6	288	...	...	...	...	54	...	...	1334
9	52	40	1280	12	576	...	...	...	...	74	...	...	1930
10	47	37	1184	8	384	2	88 +2	...	...	49	...	...	1707
11	22	17	544	5	240	...	...	...	...	25	...	...	809
12	32	28	896 +2	1	48	3	132 +6	...	...	57	...	...	1141
13	25	21	672	4	192	...	...	...	...	36	...	...	900
14	15	11	352	4	192+1	...	...	...	...	37	...	...	582
15	32	24	768	7	336	...	...	...	...	50	*	16	1170

1	2	3	4	5	6	7	8	9	10	11	12	13	14
16	34	20	640	2	96	12	528 +14	...	...	50	...	...	1328
17	20	15	480	5	240	...	...	...	...	57	...	...	777
18	25	24	768	1	48	...	...	...	...	46	...	...	862
19	32	31	992	1	48	...	...	...	...	29	...	...	1069
20	21	21	672	...	...	...	...	...	...	26	...	...	698
21	21	21	672	...	...	...	...	...	...	49	...	...	721
						Samāptaṃ Udyoga-Parva							
22	39	...	...	...	...	38	1672 +10	1	66	26	...	...	1774
23	27	2	64	...	...	25	1100 +5	...	...	28	...	...	1197
24	10	...	...	...	...	10	440 +7	...	...	26	...	...	473
25	15	...	...	...	...	15	660 +4	...	...	33	...	...	697
26	28	...	...	...	...	26	1144 +13	2	132+2	26	...	...	1317
27	27	...	...	...	...	27	1188 +6	...	...	26	...	...	1220
28	14	...	...	...	...	14	616 +4	...	...	27	...	...	647
29	51	4	128	...	...	37	1628 +18	9	594+3	28	†	38	2437
30	47	...	...	...	...	47	2068 +21	...	...	31	...	...	2120
31	23	23	736	...	...	...	...	...	...	27	...	...	763
32	30	2	64	...	...	28	1232 +10	...	...	76	...	...	1382

Samāptaṃ Saṁjayāyāna-Parva

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*Indicates *anuṣṭubh* stanza of 2 pādas

† Indicates a stanza of mixed metre.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
33	104	80	2560	...	...	24	1056 +8	...	...	79	...	...	3703
34	83	78	2496 +1	...	...	5	220	...	...	33	...	...	2750
35	67	56	1792	...	...	11	484 +2	...	...	150	...	...	2428
36	72	41	1312	...	...	31	1364 +13	...	...	56	...	...	2745
37	60	33	1056	...	...	27	1188 +11	...	...	39	...	...	2294
38	44	36	1152	2	96	6	264 +5	...	...	26	...	...	1543
39	70	69	2208	...	...	1	44 +1	...	...	49	...	...	2302
40	30	12	384	...	...	18	792 +6	...	...	33	...	...	1215
41	11	9	288	2	96	...	...	...	...	72	...	...	456
						Samāptaṃ Prajāgara-Parva							
42	32	16	512	1	48	15	660 +9	...	...	74	...	...	1303
43	37	20	640 +1	8	384	9	396 +1	...	...	81	...	...	1503
44	24	6	192	...	...	18	792 +26	...	...	67	...	...	1077
45	48	17	544	...	...	8	352 +7	...	...	40	*†	386	1329
						Samāptaṃ Sanatsujāta-Parva							
46	17	16	512 +1	1	48	...	...	...	...	35	...	...	596
47	103	...	...	...	...	101	4444 +39	2	132+1	35	...	...	4651
48	47	46	1472	1	48	...	...	...	...	55	...	...	1575
49	45	39	1248	6	288	...	...	...	...	65	...	...	1601
50	61	60	1920	...	...	1	44	...	...	26	...	...	1990

*Indicates *anuṣṭubh* stanza of 2 pādas.
† Indicates *triṣṭubh* stanza of 2 pādas.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
51	19	15	480	2	96	2	88	...	...	28	...	...	692
52	16	16	512	...	...	...	...	...	...	27	...	...	539
53	19	15	480	4	192	...	...	...	...	26	...	...	698
54	66	60	1920	6	288	...	...	...	...	36	...	...	2244
55	16	8	256	...	...	8	352 +10	...	...	47	...	...	665
56	60	56	1792	3	144	1	44 +1	...	...	60	...	...	2041
57	29	29	928	...	...	...	...	...	...	50	...	...	978
58	30	30	960	...	...	...	...	...	...	47	...	...	1007
59	23	23	736	...	...	...	...	...	...	31	...	...	767
60	29	29	928	...	...	...	...	...	...	28	...	...	956
61	18	...	...	...	...	18	792	...	...	43	...	...	835
62	31	31	992	...	...	...	...	...	...	47	...	...	1039
63	16	16	512	...	...	...	...	...	...	28	...	...	540
64	15	7	224	...	...	8	352 +16	...	...	36	...	...	628
65	9	4	128	...	...	5	220 +5	...	...	51	...	...	404
66	15	15	480	...	...	...	...	...	...	27	...	...	507
67	21	21	672 +1	...	...	...	...	...	...	92	...	...	765
68	14	12	384	2	96	...	...	...	...	35	...	...	515
69	7	...	...	...	...	7	308 +4	...	...	40	...	...	352

Samāptaṃ Yānasaṁdhi-Parva

1	2	3	4	5	6	7	8	9	10	11	12	13	14
70	93	92	2944	1	48	...	...	...	...	70	...	...	3062
71	37	33	1056	1	48	1	44	2	132	29	...	...	1309
72	23	23	736	...	...	...	...	...	...	29	...	...	765
73	23	23	736	...	...	...	...	...	...	30	...	...	766
74	18	17	544	1	48	...	...	...	...	31	...	...	623
75	20	20	640	...	...	...	...	...	...	29	...	...	669
76	20	20	640	...	...	...	...	...	...	628	...	...	668
77	21	21	672	...	...	...	...	...	...	29	...	...	701
78	18	18	576	...	...	...	...	...	...	29	...	...	605
79	9	9	288	...	...	...	...	...	...	44	...	...	332
80	49	49	1568	...	...	...	...	...	...	29	...	...	1597
81	72	72	2304	...	...	...	...	...	...	42	...	...	2346
82	29	29	928	...	...	...	...	...	...	45	...	...	973
83	18	18	576	...	...	...	...	...	...	29	...	...	605
84	21	21	672	...	...	...	...	...	...	30	...	...	702
85	17	17	544	...	...	...	...	...	...	28	...	...	572
86	23	23	636	...	...	...	...	...	...	65	...	...	801
87	26	26	832	...	...	...	...	...	...	30	...	...	862
88	104	99	3168 +2	5	240	...	...	...	...	30	...	...	3440
89	41	41	1312	...	...	...	...	...	...	32	...	...	1344
90	28	23	736	...	...	5	220 +2	...	...	29	...	...	987
91	22	20	640 +1	...	...	2	88	...	...	29	...	...	758
92	53	53	1696	...	...	...	...	...	...	30	...	...	1726
93	62	60	1920	2	96	...	...	...	...	30	...	...	2046

1	2	3	4	5	6	7	8	9	10	11	12	13	14
94	45	41	1312 +1	4	192	...	...	...	...	74	...	...	1579
95	21	21	672	...	...	...	...	...	...	31	...	...	703
96	25	25	800	...	...	...	...	...	...	33	...	...	833
97	20	20	640	...	...	...	...	...	...	34	...	...	674
98	19	19	608	...	...	...	...	...	...	34	...	...	642
99	16	16	512	...	...	...	...	...	...	29	...	...	541
100	15	15	480	...	...	...	...	...	...	26	...	...	506
101	26	26	832	...	...	...	...	...	...	35	...	...	867
102	29	27	864	2	96	...	...	...	...	44	...	...	1004
103	38	38	1216	...	...	...	...	...	...	47	...	...	1263
104	26	24	768	2	96	...	...	...	...	47	...	...	911
105	19	18	576	1	48	...	...	...	...	30	...	...	654
106	18	18	576	...	...	...	...	...	...	30	...	...	606
107	21	20	640	1	48	...	...	...	...	30	...	...	718
108	19	17	544	2	96	...	...	...	...	30	...	...	670
109	26	26	832	...	...	...	...	...	...	30	...	...	862
110	22	21	672	1	48	...	...	...	...	48	...	...	768
111	23	23	736	...	...	...	...	...	...	32	...	...	768
112	20	18	576	2	96	...	...	...	...	31	...	...	703
113	21	21	672	...	...	...	...	...	...	32	...	...	704
114	22	22	704	...	...	...	...	...	...	44	...	...	748
115	18	18	576	...	...	...	...	...	...	51	...	...	627
116	21	21	672	...	...	...	...	...	...	31	...	...	703
117	23	21	672	2	96	...	...	...	...	44	...	...	812

1	2	3	4	5	6	7	8	9	10	11	12	13	14
118	22	22	704	...	...	...	...	...	...	32	...	...	736
119	28	26	832	2	96	...	...	...	...	57	...	...	985
120	18	17	544	1	48	...	...	...	...	36	...	...	628
121	22	18	576	2	96	2	88 +4	...	...	52	...	...	816
122	61	61	1952	...	...	...	...	...	...	41	...	...	1993
123	27	26	832	1	48	...	...	...	...	35	...	...	915
124	18	18	576	...	...	...	...	...	...	35	...	...	611
125	26	26	832	...	...	...	...	...	...	35	...	...	867
126	49	49	1568	...	...	...	...	...	...	34	...	...	1602
127	53	53	1696	...	...	...	...	...	...	50	...	...	1746
128	52	51	1632	1	48	...	...	...	...	35	...	...	1715
129	34	30	960	4	192	...	...	...	...	36	...	...	1188
130	32	29	928	3	144	...	...	...	...	44	...	...	1116
131	42	37	1184	5	240	...	...	...	...	40	...	...	1464
132	40	39	1248	1	48	...	...	...	...	31	...	...	1327
133	37	30	960	7	336	...	...	...	...	54	...	...	1350
134	21	19	608	2	96	...	...	...	...	40	...	...	744
135	30	26	832	4	192	...	...	...	...	39	...	...	1063
136	26	24	768	2	96	...	...	...	...	34	...	...	898
137	22	22	704	...	...	...	...	...	...	55	...	...	759

Samāptaṃ Bhagavadyāna-Parva

1	2	3	4	5	6	7	8	9	10	11	12	13	14
138	28	27	864	1	48	...	...	...	...	47	...	...	959
139	57	56	1792	1	48	...	...	...	...	35	...	...	1875
140	20	17	544	...	...	3	132	...	...	33	...	...	709
141	49	45	1440	4	192	...	...	...	...	51	...	...	1683
142	30	29	928	1	48	...	...	...	...	36	...	...	1012
143	12	12	384	...	...	...	...	...	...	28	...	...	412
144	26	24	768	2	96	...	...	...	...	50	...	...	914
145	40	33	1056	7	336	...	...	...	...	74	...	...	1466
146	35	22	704	4	192	9	396 +1	...	...	35	...	...	1328
147	35	28	896	2	96	5	220	...	...	36	...	...	1248
148	19	17	544	2	96	...	...	...	...	47	...	...	687
Samāptaṃ Karṇopanivāda-Parva													
149	84	77	2464	7	336	...	...	...	...	72	...	...	2872
150	27	26	832	1	48	...	...	...	...	42	...	...	922
151	27	27	864	...	...	...	...	...	...	36	...	...	900
152	31	29	928	2	96	...	...	...	...	45	...	...	1069
Samāptaṃ Abhiniryāṇa-Parva													
153	35	34	1088	1	48	...	...	...	...	53	...	...	1189
154	34	31	992	3	144	...	...	...	...	59	...	...	1195
155	38	37	1184	1	48	...	...	...	...	36	...	...	1268
156	15	14	448	1	48	...	...	...	...	60	...	...	556
Samāptaṃ Bhīṣmābhiṣecana-Parva													

1	2	3	4	5	6	7	8	9	10	11	12	13	14
157	18	16	512	2	96	...	....	...	...	34	...	...	642
158	41	34	1088	...	...	7	308 +6	...	...	47	...	...	1449
159	13	13	416	...	...	...	...	...	...	33	...	...	449
160	29	24	768	...	...	5	220 +1	...	...	40	...	...	1029
Samāptaṃ Ulūkayāna-Parva													
161	12	12	384	...	...	...	...	...	...	32	...	...	416
162	33	32	1024 +1	1	48	...	...	...	...	58	...	...	1131
163	22	22	704	...	...	...	...	...	...	30	...	...	734
164	38	38	1216	...	...	...	...	...	...	31	...	...	1247
165	27	23	736	4	192	...	...	...	...	37	...	...	965
166	39	35	1120	4	192	...	...	...	...	47	...	...	1359
167	14	14	448	...	...	...	...	...	...	31	...	...	479
168	25	20	640	5	240	...	...	...	...	31	...	...	911
169	21	20	640	...	...	1	44 +1	...	...	45	...	...	730
Samāptaṃ Rathātirathasaṁkhyā-Parva													
170	22	18	576	4	192	...	...	...	...	37	...	...	805
171	9	8	256	1	48	...	...	...	...	32	...	...	336
172	23	19	608	4	192	...	...	...	...	31	...	...	831
173	18	13	416	5	240	...	...	...	...	31	...	...	687
174	26	21	672 +1	5	240	...	...	...	...	41	...	...	954
175	30	30	960 +2	...	...	...	...	...	...	55	...	...	1017
176	42	42	1344	...	...	...	...	...	...	73	...	...	1417
177	24	24	768 +2	...	...	...	...	...	...	60	...	...	830

1	2	3	4	5	6	7	8	9	10	11	12	13	14
178	38	32	1024 +1	6	288	...	...	...	...	32	...	...	1345
179	31	30	960	1	48	...	...	...	...	38	...	...	1046
180	39	39	1248 +3	...	...	...	...	...	...	40	...	...	1291
181	36	32	1024	4	192 +1	...	...	...	...	31	...	...	1248
182	16	4	128	...	...	12	528 +5	...	...	30	...	...	691
183	27	21	672	2	96	4	176 +2	...	...	30	...	...	976
184	18	18	576	...	...	...	...	...	...	32	...	...	608
185	23	23	736 +1	...	...	...	...	...	...	31	...	...	768
186	36	30	960 +1	4	192	2	88	...	...	31	...	...	1272
187	40	37	1184	3	144	...	...	...	...	31	...	...	1359
188	18	16	512	2	96	...	...	...	...	31	...	...	639
189	18	16	512 +1	2	96	...	...	...	...	40	...	...	649
190	23	20	640 +1	2	96	1	44	...	...	45	...	...	826
191	20	17	544	3	144	...	...	...	...	32	...	...	720
192	30	27	864	1	48	2	88	...	...	31	...	...	1031
193	66	54	1728	7	336	5	220	...	...	66	...	...	2350
194	22	21	672	1	48	...	...	...	...	44	...	...	764
195	20	20	640	...	...	...	...	...	...	35	...	...	675
196	19	19	608	...	...	...	...	...	...	34	...	...	642
197	21	17	544	4	192	...	...	...	...	53	...	...	789

Samāptaṃ Ambopākhyāna-Parva

TOTALS IN UDYOGAPARVAN

	6063	5056	161792 +24	274	13152 +2	712	31328 +306	16	1056+6	8036	25	440	216142

38

Parvasaṃgraha Figures for the Bhīṣmaparvan of the *Mahābhārata**

1. The theory that the Parvasaṃgraha of the *Mahābhārata* represents accurate counts of the number of syllables in a particular recension of the *Mahābhārata* has been propounded in this journal (66. 110–7). The unit for the counts is the *śloka*, to be understood as thirty-two letters, and including everything that was pronounced at a recitation of the sacred work. This proposition was based upon counts made by E.D. Kulkarni, whose figures were also published (JAOS. 66. 118–45).

2. A further set of counts for the BORI (critical edition of the Bhīṣmaparvan is appended herewith, with the same method of counting and notation as in the previous communication. The former conclusions are in no way modified by these figures, which show an observed grand total of 5828$^{1}/_{8}$ *ślokas* as against 5884 to be expected from the Parvasaṃgraha, the difference being negligible by the chi-square or any other comparable statistical test. The total number of *adhyāyas* is the same in the present text edited by Belvalkar as in the Parvasaṃgraha, namely 117. Finally, the division into sub-parvans is extremely uneven—by analysis of variance, significantly so—while the distribution of the logarithms of *adhyāya* lengths is anormal. If these statistical findings mean anything, it can only be that neither the original redaction nor the division into sub-parvans are sufficiently uniform to have been done by a single person.

**Journal of the American Oriental Society*, vol. 71 (1951), pp. 21–5.

[Though this paper was received at the end of 1946, various considerations have required that it not be printed before now. Dr. Kosambi's remarks in 5 on the inclusion in the Poona edition of the two *padas* 12.20^{ed} are not affected by the editor's discovery of them in K$_8$, a manuscript characterized by the editor as giving 'a conflated text of the K version.' Dr. Kosambi says in a letter 'the editorial choice was made on the basis of the only manuscript cited in the apparatus.' M. B. E.]

3. Taking the *śloka* as 32 syllables shows that the published critical text is nearest to the Parvasaṃgraha figure (5884), which also agrees with the *parvan* colophons of Belvalkar's $S_1K_{0\text{-}3}D_6$. His D_8 gives the figure as 6000 *granthas*, not too large to fit our counts; his D_4 gives 9,500 *granthas*, which is far too great.

4. An important part of the critical apparatus ($S_1K_{0\text{-}2}B_{2\text{-}4}DnD_{4\text{-}8}$) following the Bhagavadgītā give the puzzling *gītāmāna* stanza:

ṣaṭ śatāni saviṁśāni ślokānāṁ prāha keśavaḥ
arjunaḥ saptapañcāśat saptaṣaṣṭis tu saṁjayaḥ
dhṛtarāṣṭraḥ ślokam ekaṁ gītayā mānam ucyate

This gives the Bhagavadgītā total as 745 *ślokas* while the actual number of stanzas found is just seven hundred. The situation is further complicated by the existence of a Kasmirian recension of the Bhagavadgītā actually containing 745 stanzas. But Kulkarni's data actually show a total count for the Gītā (inclusive of *uvāca* insertions and colophons) of 743 *ślokas* of 32 syllables each. The *gītāmāna* controversy could, therefore, be settled as follows. It may reasonably be inferred that an accurate count, letter by letter, of the Bhagavadgītā originally gave the figure 745 in 32-syllable units, which became traditional. Afterwards, the process of inflation continued unchecked for the whole of the *Mahābhārata* till it became necessary to take *śloka* not as *grantha* but as any proper stanza; otherwise the discrepancy between traditional measures and the available text would have been inexplicable. But this new interpretation of the term *śloka* in measuring the text would then give a striking difference for so essential a component of the text as the Bhagavadgītā. This would naturally lead to the revised Kasmirian recension followed by the detailed *gītāmāna* record.

5. Close agreement between the Parvasaṃgraha figures and the observed extent of any parvan as published is not necessarily a justification of the editorial method. Not only particular readings but even the inclusion or exclusion of whole lines may be open to doubt. For example, we see in Belvalkar's edition of The Bhīṣmaparvan, *adhyāya* 12.20^{ed}, the following line:

āste 'tra bhagavān kṛṣṇas tat kāntyā śyāmatāṁ gataḥ.

This, though underscored by the convenient wavy line, has been accepted into the critical text on the authority of a single manuscript D_3 out of the entire agregate of sources. Moreover, it had hitherto been considered that the *devanāgarī* group (to which D_3 presumably belongs) was the least reliable of all. The present editorial method, therefore, seems to differ considerably from that followed by the late V.S. Sukthankar, who initiated the BORI critical edition.

6. While analyzing the hypermetric *ślokas* of the first five *parvans*, Fr. A. Esteller, S. J., of St. Xavier's College, Bombay, found that the following corrections were necessary for the figures originally given by Kulkarni.

1.89.44, 1.89.47, 1.89.49 are each hypermetric with one extra syllable, so that 1.89 should have one more *akṣara*.

2.24.11 has an extra letter.

3.194.28, 3.281.108 are *2-pāda anuṣṭubhs*. 3.297 should have three more *akṣaras* added.

4.14.16, 4.15.5, 4.19.23 are *2-pāda anuṣṭubhs*; 4.46.12 is hypermetric with one extra syllable.

To Fr. Esteller are also due three corrections to Kulkarni's Bhīṣmaparvan figures.

Bhīṣmaparvan Figures*

E.D. Kulkarni

		Anuṣṭubh 4-pādas		Anuṣṭubh 6-pādas		Triṣṭubh 4-pādas		Triṣṭubh 6-pādas					
Adhyāya	Total stanzas	Regular	Akṣaras	Regular	Akṣaras	Regular	Akṣaras	Regular	Akṣaras	Prose akṣaras	Other metres	Akṣaras	Total akṣaras
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	34	34	1088	...	...	...	...	...	...	34	...	...	1122
2	33	33	1056 + 1	...	...	...	...	...	...	59	...	...	1116
3	46	42	1344	4	192	...	...	...	...	31	...	...	1567
4	35	24	768	4	192	7	308 + 2	...	...	50	...	...	1320
5	21	21	672	...	...	...	...	...	...	32	...	...	704
6	16	13	416 + 1	3	144	...	...	...	...	30	...	...	691
7	53	44	1408 + 1	9	432	...	...	...	...	33	...	...	1874
8	31	29	928	2	96	...	...	...	...	31	...	...	1055
9	21	20	640	1	48	...	...	...	...	39	...	...	727
10	74	74	2368	...	...	...	...	...	...	31	...	...	2399
11	14	14	448	...	...	...	...	...	...	32 + 13	...	...	493

Samāptaṃ Jambūkhaṇḍavinirmāṇa-Parva

(*Contd.*)

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*I gratefully acknowledge the help given by Rao Bahadur Dr S.K. Belvalkar in making an advance copy of the Bhīṣmaparvan text available to me through the Deccan College Oriental Research Institute.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
12	37	31	992	6	288	...	...	...	...	57	...	...	1337
13	50	45	1440 + 1	5	240	...	...	...	...	38 + 7	...	...	1726
Samāptaṃ Bhūmi-Parva													
14	13	13	416	...	...	...	...	...	...	27	...	...	443
15	75	72	2304	3	144	...	...	...	...	26	...	...	2474
16	46	45	1440	1	48	...	...	...	...	24	...	...	1512
17	39	37	1184	2	96	...	...	...	...	25	...	...	1305
18	18	18	576	...	...	...	...	...	...	25	...	...	601
19	44	42	1344	2	96	...	...	...	...	33	...	...	1473
20	20	4	128	...	...	16	704 + 8	...	...	30	...	...	870
21	17	17	544 + 1	...	...	...	...	...	...	25	...	...	570
22	22	11	352	...	...	11	484 + 2	...	...	44	...	...	882
(*Bhagavadgītā begins*)													
23	47	47	1504	...	...	...	...	...	...	32	...	...	1536
24	72	64	2048	...	...	8	352 + 3	...	...	64	...	...	2467
25	43	43	1376	...	...	...	...	...	...	45	...	...	1421
26	42	42	1344	...	...	...	...	...	...	38	...	...	1382
27	29	29	928	...	...	...	...	...	...	32	...	...	960
28	47	47	1504	...	...	...	...	...	...	52	...	...	1556
29	30	30	960	...	...	...	...	...	...	27	...	...	987
30	28	24	768	...	...	4	176 + 1	...	...	30	...	...	975
31	34	32	1024	...	...	2	88	...	...	26	...	...	1138

(*Contd.*)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
32	42	42	1344	...	...	...	...	...	...	38	...	...	1382
33	55	19	608 + 1	...	...	36	1584	...	...	89	...	...	2282
34	30	20	640	...	...	...	...	...	...	32	...	...	672
35	34	34	1088	...	...	...	...	...	...	26	...	...	1114
36	27	27	864	...	...	...	...	...	...	38	...	...	902
37	20	15	480	...	...	5	220 + 1	...	...	26	...	...	727
38	24	24	768	...	...	...	...	...	...	26	...	...	794
39	28	28	896	...	...	...	...	...	...	35	...	...	931
40	78	78	2496	...	...	...	...	...	...	44 + 10. . .	...	2550	
						Samāptaṃ Bhagavadgītā-Parva							
41	104	102	3264 + 2	1	48	...	...	...	...	237	(*anuṣṭubh*) (2 pādas)	16	3567
42	30	28	896	...	...	2	88 + 4	...	...	33	...	...	1021
43	83	76	2432	7	336	...	...	...	...	26	...	...	2794
44	48	44	1408	4	192	...	...	...	...	27	...	...	1627
45	63	59	1888	4	192 + 1	...	...	...	...	27	...	...	2108
46	56	50	1600	6	288	...	...	...	...	26	...	...	1914
47	30	30	960	...	...	...	...	...	...	27	...	...	987
48	70	66	2112	4	192	...	...	...	...	34	...	...	2338
49	40	38	1216	2	96	...	...	...	...	34	...	...	1346
50	115	102	3264	13	624	...	...	...	...	31	...	...	3919
51	43	43	1376	...	...	...	...	...	...	26	...	...	1402
52	22	21	672	1	48	...	...	...	...	25	...	...	745
53	34	32	1024	2	96	...	...	...	...	25	...	...	1145

(*Contd.*)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
54	44	40	1280	4	192	...	...	...	...	26	...	...	1498
55	132	68	2176	3	144	55	2420 + 7	6	396	33	...	...	5176
56	28	...	...	...	...	28	1232	...	...	25	...	...	1257
57	36	36	1152	...	...	...	...	...	...	26	...	...	1178
58	61	57	1824	4	192	...	...	...	...	27	...	...	2043
59	29	21	672	2	96	6	264 + 1	...	...	28	...	...	1061
60	79	70	2240	9	432	...	...	...	...	25	...	...	2697
61	70	58	1856	10	480	2	88	...	...	40	...	...	2464
62	40	37	1184	2	96	1	44	...	...	25	...	...	1349
63	21	15	480	6	288	...	...	...	...	32	...	...	800
64	18	16	512	2	96	...	...	...	...	32	...	...	640
65	33	32	1024	1	48	...	...	...	...	27	...	...	1099
66	22	21	672	1	48	...	...	...	...	26	...	...	746
67	41	38	1216	3	144	...	...	...	...	27	...	...	1387
68	33	32	1024	1	48	...	...	...	...	27	...	...	1099
69	41	37	1184	4	192	...	...	...	...	29	...	...	1405
70	37	33	1056	4	192	...	...	...	...	26	...	...	1274
71	36	34	1088	2	96	...	...	...	...	28	...	...	1212
72	26	26	832	...	...	...	...	...	...	28	...	...	860
73	71	58	1856	5	240	4	176	4	264 + 4	27	...	...	2567
74	36	36	1152	...	...	...	...	...	...	28	...	...	1180
75	59	52	1664	7	336	...	...	...	...	28	...	...	2028
76	19	3	96	...	...	16	704 + 3	...	...	27	...	...	830
77	44	40	1280	4	192	...	...	...	...	28	...	...	1500
78	57	47	1504	10	480	...	...	...	...	28	...	...	2012
79	55	51	1632	4	192	...	...	...	...	35	...	...	1859

(Contd.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
80	51	43	1376	8	384	...	...	...	...	26	...	...	1786
81	37	...	...	...	...	31	1364 + 2	6	396 + 1	27	...	...	1790
82	56	54	1728	2	96	...	...	...	...	26	...	...	1850
83	39	37	1184	2	96	..	..	...	...	26	...	...	1306
84	43	41	1312 + 3	2	96	...	...	...	...	28	...	...	1439
85	36	33	1056	3	144	...	...	...	...	34	...	...	1234
86	86	76	2432	10	480	...	...	...	...	27	...	...	2939
87	30	28	896	2	96	...	...	...	...	34	...	...	1026
88	38	28	896	10	480	...	...	...	...	27	...	...	1403
89	41	67	1184	4	192	...	...	...	...	29	...	...	1405
90	46	38	1216	8	384	...	...	...	...	26	...	...	1626
91	81	71	2272	10	480	...	...	...	...	28	...	...	2780
92	79	76	2432	3	144	...	...	...	...	27	...	...	2603
93	41	37	1184	4	192	...	...	...	...	27	...	...	1403
94	20	16	512	4	192	...	...	...	...	28	...	...	732
95	53	45	1440	6	288	2	88 + 4	...	...	28	...	...	1848
96	51	46	1472	5	240	...	...	...	...	27	...	...	1739
97	57	53	1696	4	192	...	...	...	...	35	...	...	1923
98	38	36	1152	2	96	...	...	...	...	35	...	...	1283
99	47	47	1504	...	...	...	...	...	...	28	...	...	1532
100	37	36	1152	1	48	...	...	...	...	25	...	...	1225
101	33	29	928	4	192	...	...	...	...	29	...	...	1149
102	78	66	2112	10	480	2	88	...	...	28	...	...	2708
103	101	90	2880	11	528	...	...	...	...	77	...	...	3485
104	58	55	1760	3	144	...	...	...	...	50	...	...	1954
105	37	33	1056	4	192	...	...	...	...	36	...	...	1284

(Contd.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
106	45	39	1248	6	288	...	...	...	...	29	...	...	1565
107	55	49	1568	6	288	...	...	...	...	29	...	...	1885
108	41	41	1312	...	...	...	...	...	...	29	...	...	1341
109	48	40	1280	8	384	...	...	...	...	29	...	...	1693
110	46	44	1408	2	96	...	...	...	...	29	...	...	1533
111	43	43	1376	...	...	...	...	...	...	38	...	...	1414
112	138	126	4032	12	576	...	...	...	...	30	...	...	4638
113	49	41	1312	8	384	...	...	...	...	31	...	...	1727
114	112	97	3104	15	720	...	...	...	...	31	...	...	3855
115	65	55	1760	10	480	...	...	...	...	38	...	...	2278
116	51	35	1120	8	384	8	352 + 2	...	...	30	...	...	1888
117	34	33	1056	1	48	...	...	...	...	47 + 9	...	...	1160
Samāptaṃ Bhīṣmavadha-Parva. Samāptaṁ Bhīṣma-Parva													
	5406	4771	152672 + 11	372	17856 + 1	246	10824 + 40	16	1056 + 5	3980 + 39	1	16	186500

39

The Sanskrit Equivalents of Two Pāli Words*

In this note, new Sanskrit equivalents are proposed for the Pāli words *sammāpāso* and *vassakāra*. The first of these is usually restored as *samyak-pāśa*, on the analogy of the eightfold path, and such equivalences as sammāsaṃbudha = samyak–saṃbuddha. The second is Sanskritized as Varṣakāra, being the name of a high Brahmin minister of king Ajāta-śatru.

1. *Sammāpāso = Śamyāprāsaḥ*

A famous gāthā of the Kosalasaṃyutta reads: *assamedhaṃ purisamedhaṃ sammāpāsaṁ vājapeyam* | *niraggaḷaṃ mahārambhā na te honti mahapphalā* ||. Here the Buddha preaches against the five great *yajñas* which, in his view, give no fruit that can compensate the killing. The passage, of course, may be of later composition, but even so must have been founded in fairly early tradition, for the fight against fire-sacrifices in general had long been won when the Buddhist canon was officially edited. Of the five, the first is clearly the *aśvamedha*, the second the *puruṣamedha*, and the fourth, the *vājapeya*. All these are well known to the Vedic and Brahmanic ritual, though the second had gone out of fashion. The other two are not known under the restored names *samyakpāśa* and *nirargala*. The question then is: did the writeṛ of the gāthā make a mistake through ignorance or are these sacrifices actually to be recognized, perhaps under some other name?

Patañjali on Pāṇini 4.1.33 gives a different list of five great yajñas:

***Annals of the Bhandarkar Oriental Research Institute*, vol. 32 (1951), pp. 34–66. This paper was originally destined for the Gode Festschrift, and is still dedicated to Prof. P.K. Gode, true scholar and good friend.

sarveṇa ca gṛhasthena pañca mahāyajñā nirvartyāḥ, yac cādaḥ sāyaṁ-prātar-homa-caru-puroḍāśān nirvapali tasyāsāviṣṭe. Now it cannot be argued that this casts any doubt on the gāthā list; these are modest householder's sacrifices, much more restricted in scope and expense than the others, which are royal prerogatives weighing heavily upon the subject population. If we took Patañjali's list as valid on all occasions, we should have to abandon even the three great *yajñas* identified above. The five principal *yajñas* of the Śatapatha Brāhmaṇa [6.2.1.18] are merely a classification by the five principal sacrificial animals, whence even the *vājapeya* is not properly included therein, though well known to the Brāhmaṇa. In the Manusmṛti 3.69–71 the sacred number five of the mahāyajñas is still retained but the sacrifices have been sublimated to an idealized position: *adhyāpanaṁ brahmayajñaḥ pitṛyajñastu tarpaṇam; homo daivo balir bhauto nṛyajño'tithi-pūjanam.* This can give no information about the original five great sacrifices, beyond their number.

A reasonable conjecture is possible about the fifth in Buddha's series, *nirargala*. I submit that this could only mean the later form of the *aśvamedha*, so well-known from its description in classical Sanskrit literature, as contrasted with the original where the main function was the actual killing of the horse, just like the killing of any other victim at the sacrifice. In the later form, the effects of the sacrifice are greatly heightened by first setting the horse free (unbridled = *nirargala*) for a certain period, conquering those who opposed the horse's passage. A parallel is found in other places and times with the human sacrifice, where the victim has a period of the freest enjoyment of pleasures before being killed; rudimentary traces of this survive even into modern times in connection with those agrarian festivals which are derived from fertility rites. Finally, we can demonstrate specific use of the adjective in connection with the *aśvamedha*, as for example in the Rāmopākhyāna of the Mahābhārata (Crit. ed. 3.275.69 cd) *daśāśvamedhān ājahre jārūthyān sa nirargalān*. Rāma himself is credited in the epic with having followed the later fashion. In Ṛgveda i. 162–3, the oldest aśvamedha did not allow the horse to wander free, being a direct sacrifice.

There remains the *sammāpāso*. To Brahmasri V.S. Ramacandra Sastrigal of Bangalore, I owe the suggestion that we should see here *śamyāprāsa* or *°parāsa*. Several references can be found in liturgical texts: Āśvalāyana śrauta sūtra 3.10.9: *āhavanīyam avadīpyamānam arvāk śamyāparāsād idanta ekampara ūta ekam iti saṃvapet* ||. Kātyāyana śrauta sūtra 15 9.9: *āhavaniyād vā purastāc chamyāprāse śamyāprāsa āgneya-saumya-sāvitra-bārhaspatya-tvāṣṭra-vaiśvānarā yathoktam* ||

(cf. also Ṣaḍviṃśa Brāhmaṇa 2.10 and com.). Just what the act was, is not clear but it seems to have been of considerable importance, first because of its association with the river Sarasvatī: Tāṇḍya-mahābrāhmaṇa 25.13.2 *sa dakṣiṇena tīreṇa āgneyenāṣṭākapālena śamyāparāsīyāt*. A refuge of that name is placed on the west bank of the Sarasvatī in Bhāgavatapurāṇa 1.7.2 *brahmanadyām sarasvatyām āśramaḥ paścime taṭe* I *śamyāprāsa iti prokta ṛṣīṇāṃ satravardhanaḥ* II. One may recall here the story of Bṛhaddevatā vii. 58–9 which shows Vyaṃsa (who had become king of Videha, a country then outside the Aryan pale, by a curse of Vasiṣṭha) being allowed to sacrifice on the banks of the Sarasvatī by favour of Indra Vaikuṇṭha.

While *śamyāprāsa* is some act of ritual casting of a rod or measurement which has given its name to the entire yajña, at least regards Magadhan tradition contemporary with the Buddha, there are other elements of sanctity in the name. *Śamyā* means a wooden wedge, rod, or peg, presumably from the wood of the *śamī* tree (*Prosopis spicigera* Lin. or *Mimosa suma* Roxb.) which is specially related to the fire-sacrifice. Just as *śampāka* has been read for *śamyāka*, the rare word *sampā* for lightning may originally have been *śamyā*. *Śamīgarbha* is an epithet of fire supposed thereby to be peculiarly resident in the wood, *agnigarbhā śamīm iva*. The moving upper part of the fire-plough (*araṇī*) is to be made of *śamī* wood. The sanctity of the tree and its uses in divination, for images, and even for specially potent tooth-sticks are attested by Varāhamihira's Bṛhatsaṃhitā: 29.11, 53.87, 54.83, 54.85, 59.5, 85.6.

Our identification *śamyāprāsa* is thus quite reasonable, taking note of the fact that it was a rare and expensive *mahāyajñā* for kings.

2. *Vassakāra* = *Vaśyakāra*

The Brahmin Vassakāra appears as Magadha-mahāmātya during the last years of Buddha's life. Even after the Buddha's death, according to *Majjhimanikāya* 108, he was chief minister at the time when Ajātaśatru was fortifying his older capital Rājagṛha against possible attack by the Pradyota king. Earlier, in the *Mahāparinibbāṇasutta* [*Dīgha-nikāya* 16], he appears associated with another chief minister Sunīdha. The two are engaged in carrying out Ajātaśatru's carefully thought out measures against the Licchavi confederacy, a principal result being the foundation of Patna on the Ganges. The city is actually being laid out as the Buddha passes through on the last journey of his life. Apart from the obvious strategic value of the site, the aṭṭhakathās give a further plausible explanation: that trade was greatly hindered by dual control of the river, both the

Licchavis and the king collecting taxes on all goods consigned to the emporium [*puṭabhedanam* = a place where bundles of merchandise are opened for trade]. The commentary goes on to give further details of the Licchavi campaign. The same minister Vassakāra was exiled in simulated disgrace by Ajātaśatru, ingratiated himself with the Licchavi oligarchs, set them against each other so that they no longer attended to business in common assembly. Ajātaśatru's army then marched in unopposed. The story itself recalls the capture of besieged Babylon for Darius by his noble Zopyrus, as narrated at the end of book III by Herodotus. Whatever the actual truth of the Magadhan story, it is undeniably set in a period of decline for the independent oligarchies, with the decay of tribal institutions, the growth of strong monarchies, and a tendency towards 'universal' empire.

The name of the minister is generally restored as Varṣakāra, 'rainmaker'. In that sense, *varṣakāra* applies to a cloud or to the cricket that chirps before a rain. It could, therefore, apply as well to certain frogs that croak before a rain, and chanting Brahmins are compared to such frogs by a famous hymn, Ṛgveda vii. 103. One may further point to the frog signet on some punch-marked coins of the pre-Mauryan period, and to the Māṇḍukya-upaniṣad, which would seem to complete a secondary proof of the restoration.

Nevertheless, I propose *vaśyakāra* (better *vaśyakara* or *vaśyakārin*) as the proper Sanskritization of *vassakāra*. Such an equivalent for the *ssa* is clearly and uniquely to be found in Vipassī = Vipasyī for the name of a legendary former Buddha (Dīgha-nikāya 14). My principal justification is the story of winning over the Licchavis. The tradition cannot be questioned that the Licchavis were conquered by the treachery of a Brahmin minister, and *vaśyakāra* would mean 'he who subjugates or wins over', a name invented after the event became accepted history. After all, the event itself belongs to the period after the passing of the Buddha, but long before the time of Aśoka, hence to a period for which memory of details was likely to be rather faint. The actual trick of sending a minister in supposed disgrace to cause dissension in the enemy's camp is found carefully illustrated in a famous Brahminical work on *nīti*, the *Pañcatantra*; it is the main theme of the entire third tantra, the *Kākolūkīyam*. The technique of breaking up dangerous saṃghas, the Licchavis included, by sowing discord through special agents, is the theme of Arthaśāstra XI.

Vassakāra seems to have been the first Brahmin to hold the position of a political minister. Tāranātha's history of Buddhism (tr. A. Schiefner, p. 3) reports Aśoka as having been under the evil influence of a minister

Bhṛgurākṣasa, by which might be meant a Bhārgava Brahmin, (though we have Bhārgava potters also as in *Majjh.* 140). But this is unquestionably the earlier of the two Aśokas who introduce so much confusion into Buddhist records, and I have shown how the name might be explained by a similarity of signets on punch-marked coins; the earlier or Kālāśoka is probably a Śaiśunāga, perhaps the same as the Kākavarṇī of the far more confused purāṇa tradition. Afterwards Brahmin ministers are commonner, the most famous being Viṣṇugupta Cāṇakya. The Śuṅga dynasty ends by Brahmin ministers usurping the throne, the Kāṇvāyanas who set so handy an example to the Peshwas.

The Licchavis maintained their prestige as a superior Aryan tribe for a whole millennium after the Buddha, as shown by the special honour accorded to and derived from the princess Kumāradevī in the earlier Gupta inscriptions. But the Magadhan Brahmins were already being known in the earlier age by the contemptuous designation of *brahmabandhu*, precisely for their association with extra-Vedic *vrātyas* such as the Licchavis. To judge from the names given for characters of like standing, Vassakāra should have been given either by a *gotra* name or by double nomenclature. For example, the brigand Aṃgulīmāla is Gārgya Maitrāyaṇīputra [*Majjh.* 86], Sāriputta is really Upatissa Sāriputta, his friend Puṇṇa Mantāniputta [*Majjh.* 24]. The system of designation by the mother's *gotra* name is supported by the vaṃśa in the Bṛhad-āraṇyaka-upaniṣad 6.5, not to mention the later (and southern) Sātavāhana inscriptions. We must distinguish local customs from later uniformized regulations such as are sanctified in the Manusmṛti, which goes to the extent of deriving quite well-known tribes as mixed castes. Thus Ms. 10.22 so treats Jhalla, Malla, Nicchivi, and Draviḍa, of which the last needs no comment; the Mallas were a famous tribe in the days of the Buddha, and Nicchivi is undoubtedly to be emended as Licchavi. Guilds that developed out of provincial or tribal organizations are treated in the same manner, i.e. Ms. 10.17 for Magadha [traders], 10.15 for Vaideha and Ābhīra, 10.21 for Āvantya. The Pukkasa of Ms. 10.18 and 10.38 might be the lowly workers' guild of *Majjh.* 129, or even be connected with a Gandhāran tribe as in *Majjh.* 140.

In fact, the whole *gotra* organization seems to differ, for Magadha of those days, from anything now sanctioned in brahminical scriptures. Buddha's personal name in the Pāli tradition is everywhere Gotama, but in *Majjh.* 14 it is taken as his *gotra* name, which would normally be permissible, though his father is nowhere thus designated. But his aunt and stepmother is Mahāprajāpatī Gotamī, apparently of the Gotama *gotra*;

whence his deceased mother Māyā must also have been a Gotamī. So, we have either marriage within a *gotra* (in spite of Bodhāyana's '*gautamānāṃ śarveṣām avivāhaḥ*') or the derivation of Gotama as Gotamīputra. The former possibility would not have been mentioned at all but for the tradition of brother-sister marriages among the Śākya founders of Kapilavatthu (Dīgha-nikāya 3). This is also to be seen among the Iranians of the same period, as for example from the story of Hutosā, or the saint Ardavīraz. A rather far-fetched attempt may be made to show some contact with the Iranians by pointing to the inscriptions of Darius I, which mention three distant but apparently Aryan groups of Śakas: *sakā tigrakhodā, sakā homavṛgā, sakā tyey taradraya*; the Elamite word for Śaka in the same inscriptions is Sakka exactly as in Pāli, the Babylonian being Gimirri. We know from the Mauryan inscriptions that officers from Iran served in Western India, while the Maga Brahmins from Śākadvīpa mentioned in the Sāmba-purāṇa as settled on the Candrabhāgā (adhya 2.25, 26) are surely Magian priests of the sun—a deity whose images are to be made in Iranian dress, according to Varāhamihira. However, it is not necessary to believe in the improbable Iranian contact with or influence upon the Śākyas (the name itself being Sanskritized from the Pāli Sakka). Herzfeld (*Zoroaster and His World*, Princeton, 1947, p. 119) gives an explanation which could apply as well to India: 'The Iranians, when immigrating, superposed themselves upon an aboriginal population with matriarchal family. Their endogamy is not only foreign to all other strictly exogamous nations of the IE language, but something prohibited . . . Brother-and-sister marriage results from reconciling the two opposed principles of inheritance: it enables the son to inherit from his father as son of his father's sister. But never do children of the same mother marry.' Here, we have at least pointed to a legendary exception to the custom among 'nations of the I.E. language.' In the Pabbajjāsutta of the *Suttanipāta*, which belongs to the oldest portion of the Pāli canon, we find the Buddha's real *gotra* and family given explicitly in his own words: *ādiccā nāma gottena, sākiyā nāma jātiyā*. Possibly, the brahmin custom of citing the mother's *gotra* name may indicate a survival of group-marriage, but these speculations carry us too far from the original purpose, which was merely to show that Vassakāra is not named as he should have been by contemporary usage. His nickname is, therefore, the more likely to have been invented after the conquest of the Licchavis, as was Aṃgulimāla's from his necklace made of the little fingers of his victims. No name like *varṣakāra* is found in any of the extant *gotra* lists.

One part of Herzfeld's statements is not quite true. Herodotus reports explicitly (iii. 31) that Cambyses married 'his full sister, the daughter both of his father and his mother. It was not the custom of the Persians before his time, to marry their sisters'. Phaedima, daughter of Otanes, had been married (iii. 68) to Cambyses and was taken to wife, together with the rest of Cambyses' wives by the Maguś Bardiya, pseudo-Smerdis. Darius killed the Megus and married (iii, 88) . . . two daughters of Cyrus, Atossa and Artystonè; of whom Atossa had been married twice before, once to Cambyses her brother, and once to the Maguś . . . He married also Parmys, daughter of Smerdis, son of Cyrus; and likewise took to wife [Phaedima]'. Now note that Cyrus was himself son of his predecessor's daughter. Alexander of Macedon married Statira, daughter of the last Achaemenid Darius. He had a son by a mistress Barsiné; but his widow Roxana, who was herself with child by Alexander, caused only Statira who was not and Statira's sister (not married to Alexander) to be assassinated after Alexander's death, ignoring the low-born Barsiné and her son. All this points to just one conclusion, that in spite of patriarchal rulers, the people of the Persian empire must have preserved a tradition of *succession to the throne through the female heir*. This might give the correct translation of (Darius I): *duvitātaranam vayam khśāyathyā āmahya* (Behistūn, 4); 'we have been kings in the double line', that is, by mother-right as well as father-right.

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The Text of the *Arthaśāstra**

The discovery of the Patan Bhaṇḍār palm-leaf fragments (dated on palaeographic grounds at about the eleventh–twelfth century AD) was the first real step forward in the textual problem of the *Arthaśāstra* since the appearance of printed editions[1] based on southern texts. Ācārya Sri Jinavijaya Muni has made the new material available to all scholars, and lightened their future labours, by his comparative edition (printed, but not yet published) of the Patan folios. The actual text-fragment covers the whole of the first book (*adhikaraṇa*) except the very beginning, the first six chapters of the second, and substantial portions of 2.7 and 2.10. Here, the gloss is in the form of minuscule notes on the margin by several different hands. The other part with the commentary of Yogghama extends, with lacunae, only over the first three chapters of book two and the opening of the fourth. Nevertheless, the importance of the material is far greater than its relative extent, because substantial contributions are made thereby not only to the problem of the *Arth.* transmission, but to Indian textual criticism in general.

1. To consider minor points first: The author's personal name, also preserved by the later drama *Mudrārākṣasa*, seems to have been Viṣṇugupta. Cāṇakya is presumably the patronymic; the possible connection of this appellation with a *Caṇakarāja-nīti* reported in the Tibetan Tanjur[2] is not clear. The *gotra* name by which the brahmin author would be known outside his gens was generally taken as Kauṭilya, and the *gotra* name survives in that form today.[3] However, T. Ganapati Sastri showed that the correct form should be Kauṭalya, and adopted it for his own edition (beyond the initial fascicules). The Patan folios resolve the question by writing the name uniformly as Kauṭalya, which is also a strong variant in

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the Mysore edition, and must be taken hereafter as definitively established. The change in orthography was due, in all probability, to obsolescence of the rare name, and a false derivation from *kuṭila* = crooked, an adjective that could easily be applied to the author's writings from the point of view of later *nīti* morality.

Similarly, the discovery is not without significance for the problem of authenticity, which scholars like Keith[4] have disputed with acrid and even rabid expression of views in theological intensity. A set of folios, even of the twelfth century, that comes to light in Rajasthan or Kathiawar, cannot disprove the arbitrary conjecture that the work was forged in the name of the Magadhan chancellor by some Western Indian upstart, say about AD 300. However, the actual glosses make Keith's view even more unlikely than before. Not only does the codex prove the antiquity of the Kauṭalyan tradition, but the glossators are shown by their vocabulary to be Jains and Buddhists. The late twelfth century was so full of upheavals in the North, due primarily to the steady advance of Muslim religious and military penetration, that such a work could most plausibly have been brought from some distant, peripheral *vihāra* (like Jagaddala) on the verge of extinction, by scholars who preferred coming south to exile in Nepal or Tibet. Had it been a local effort in western India, we should have expected more copies. Neither Buddhists nor Jains could have had any reason to adopt a forgery of about AD 300 as genuine, whatever a Brahmin scholar might have done.

The much-discussed *Śukranīti*, which some insist upon taking as a document of the Gupta period (in spite of five references to gunpowder, and a good formula for its preparation), is nothing but a nineteenth-century forgery by Oppert's Sanskrit pandits at the Presidency College, Madras. For this information, I am indebted to Prof. V. Raghavan. At least, the Patan fragments are a guarantee against such recent provenance for the *Arth*.

2. The critical *Mahābhārata* Prolegomena of V.S. Sukthankar,[5] followed by Ruben's critical sample-survey for the *Rāmāyaṇa*, show what happened in India to great popular narratives. In general, the North preserves a shorter version without regard to grammatical polish and Pāṇinian rules, while the South inflates and rearranges in the interest of logic. In particular, the Kaśmīri in the North and Malayālī in the South often preserve archaic readings. For smaller works preserved in numerous copies and local versions, my own work on Bhartṛhari's epigrams yields somewhat different results, when due allowance is made for the formlessness of verses collected by different redactors without the logical

nexus of a story or drama. The South again shows logical rearrangement and rigid attention to syntax; the North presents growth by accretion but preserves archaisms.

A better 'experimental control' than the *Mbh.* or Bhartṛhari's epigrams is furnished by the *Kāmasūtra* of Vātsyāyana, modelled carefully upon the *Arth.*, with comparable phraseology and style. The main difference is that this work, though not for the vulgar herd, was always studied (for erotic titillation at least) by the literati, and the transmission has no gaps, so that the text must be classified as 'popular' in the present sense. The *Kāmasūtra* preface lists the work as having seven books, divided into 36 *adhyāyas* or 64 *prakaraṇas*, with a total content of 1250 *ślokas*. In fact, 67 *prakaraṇa* titles have actually been given. The *grantha* count is found to be about 1482, not including *adhyāya* colophons. The error of 232 *granthas* far exceeds any permissible error in estimation on the part of scribe, copyist, or author. The argument that the prefatory chapter of the *Arth.* or of the *Kāmasūtra* is spurious, and the figures given interpolated, is not sensible, as the forger would have been careful to give an accurate count to validate his own text. It may thus be taken as proved that the *Arth.* text has been eroded by neglect, due to its lack of popularity. The *Kāmasūtra* has unquestionably been inflated by those who pored over it so closely through the centuries, though the absence of a critical edition makes it impossible to trace the additions here.

The *Arth.* problem is not similar. The work was never popular in any sense of the word, being at first a special treatise for princes and their high councillors, and later a rare book studied only by the most erudite, e.g. Daṇḍin, Bāṇa, and Rājaśekhara. Most of the technical terms had become obscure long before the commentators came upon the scene, though some (like the verb *apavah-*) now reflect a remarkable light because of the Aśokan edicts. In any case, the work is represented by very few copies and was, indeed, lost completely till 1905. All southern manuscripts (including those in Kerala, Adyar, Mysore and in Europe) seem to derive from a single original, which could not have been the Patan text.

The immediate peculiarities of transcritpion are not very informative. The southerners often interchange the prefixes *apa* and *ava*, without substantial change in the meaning. The northern folios have some local peculiarities such as an occasional *Parāsara* for *Parāśara*. North contains somewhat more matter for the same portion than South. Some of this can be explained (as perhaps in 1.19 = p. 46) by a marginal gloss having entered into a later copy of the text. The explanation is not too attractive, for the *Arth.* (and in imitation the later *Kāmasūtra* of Vātsyāyana) combines *sūtra* maxims in a running text with brief *bhāṣya* type explanations.

The largest additions in Jinavijayaji's text are of 5½ *granthas* in 1.9 plus a tag *anuṣṭup* at the end; 7½ *ślokas* in tag verses at the end of 2.2; three *granthas* or so in 2.3. The remaining differences are of a word or phrase scattered at random. The additional matter in the North cannot generally be explained by such inflation, nor the occasional word or phrase in the southern (printed) texts missing in these palm-leaf finds. To cut short the discussion: it seems to me that the divergence can best be explained by long neglect and progressive dying out of the tradition. That is, most copyists were not ignorant professional scribes but scholars of ability who changed as little as possible. But they were totally unable to comprehend the forgotten technical terms and fundamentally different social structure of a vanished epoch; and there were so few of them that the occasional loss of a word, phrase, or short passage in each transcription was not compensated by any matter added by mistake. This applies both to North and South. The main reason the northern copy contains a little more is that it is older. The southerners had at least six centuries more of recopying in which to accumulate the slow losses. Had the work been popular or obligatory reading (like Paṇini's grammar) no such loss would have occurred.

3. By substantiating most of the readings of the list of contents in 1.1, the new discoveries permit inner criticism which reveals losses in the text very much greater than might have been estimated by the direct comparison of the surviving textual matter in the portion covered by the northern folios. The printed *Arth.* text would have to be augmented by about 25 per cent in order to reach the original extent of the work.

This conclusion points in the same direction as comparative study of the codices, but it has a totally different basis. The list of contents gives the extent of the whole work as 15 books (*adhikaraṇa*) in 180 sections (*prakaraṇa*) or 150 chapters (*adhyāya*), and 6000 *ślokas*. The last cannot refer to the actual stanzas found in the book. The word *śloka* must here be taken with T. Ganapati Sastri as the *grantha* unit of 32 syllables. Such is the uniform practice of early scribes in describing their copy. The stray *anuṣṭup* quarters one can pick out of the *Arth.* text come from the genius of the Sanskrit language and not from a lost material original, as some would like to believe. The round number 6000 may be suspected but, at worst, it ought to be a reasonable estimate made by counting every letter on a few sample[7] folios, whether of the original composition, or of the archetype of the definitive redaction. The possibility that a rough *grantha* count, had at some time been made for the whole work is not entirely to be excluded. Even Daṇḍin, in the final chapter of his *Daśakumāracaritam* refers to Cāṇakya's précis of *daṇḍanīti* written for the Maurya as being 6000 *ślokas* in extent; so the traditional count is old, and no variant known. That Daṇḍin referred to the *Arth.* and not to another work of Cāṇakya is clear from the detailed raillery in Prince Viś-ruta's adventure. Not only is the entire chapter charged with Kauṭalyan ideas, but the phraseology is unquestionably derived from our text of the *Arth.* In particular, all the details of the king's daily routine are taken unchanged from *Arth.* 1.16, and some are exact quotations, e.g., *tṛtīye tūryaghoṣena saṃviṣṭaḥ caturtha-pañcamau śayīta*. It is possible to go further, and to state that Daṇḍin's text was, in some particulars at least, nearer to the present fragment of the northern tradition than to any surviving southern text. South, as we now have it, repeats *svādhyāyaṃ ca kurvīta* (along with the bath and the dinner) for the third eighth of the day and the second of the night. Both North and Daṇḍin's raillery leave out the first of these.

In counting the text, the question still remains of changes in the number of syllables due to the chapter headings, colophons, variant readings and *saṃdhi* not rigidly enforced. The Patan folios, and the custom of other manuscripts of the oldest known periods show that a chapter would have had a colophon, but no rubric. The colophons of the Patan text are always shorter than those of the printed editions. A rough (unchecked) count, syllable by syllable, of Shama Sastri's (3rd) Mysore edition gives 4640 *ślokas*, including the colophons, but not the chapter headings. The combined error from all the causes mentioned above, and from miscounting, would be less than 100 such *grantha* units, in either direction.

To compare results with the traditional scribe's estimate, the counts were taken of 7½ per cent of the pages in the same edition. Alternate half-letters not combined in a ligature were counted to give a slight overestimate, simply to allow for the same tendency in a professional copyist paid by the amount of work done. The estimate thus obtained was 4762 ślokas of 32 syllables each, with a standard deviation of 108. A scribe's estimate from his manuscript would have been more accurate than from the printed pages. The manuscripts write the text continuously whereas the modern publication separates the words within the line, and further breaks up the text into small paragraphs, sometimes of half a line, so that the variation per page in this work at least is decidedly greater than from folio to folio of a manuscript. Any codex would continue with a gap of much less than a line when a chapter or a book ended, where the printed *Arth.* texts leave more space, insert headings and colophons in different types. The deficit of about 1200 *granthas* is not to be denied. The difference is much too great to be explained by a miscount in antiquity.

The deficit in the *Arth.* text can actually be taken as another argument in support of its general (overall) authenticity. Any forger would have been careful to give full measure. The original text seems to have leaked away over the centuries, for lack of application to current administrative problems. The result is that small bits have disappeared from every portion. In a late document, a defect of the magnitude we have just measured would have arisen mainly from missing folios, which means that the gaps would be long, connected passages. At no place does the surviving northern text show a folio-size difference from the southern.

4. It does not reduce our difficulties in any way to note that even the enumeration by sections does not coincide in North and South. The Northern text actually lists a total of 184 sectional titles though the number is given as 180. The list agrees in books 1, 4–6, 8, 11–12, and 15. North contains three more in book 2, two more in book 14, one each in 7 and 10; it contains one less than the South in each of books, 3, 9, and 13. The southern total is, therefore, accurately 180 sections. The difference arises primarily by combining two adjacent sections, or subdividing a long title. The original scribe had completely omitted the contents of the fifth book in the Patan folios of 1.1; this has been entered on the margin in minuscule by another hand. One hitherto unknown sectional title in the second book is illegible on the northern folios of 1.1; the seventh book contains one and the fourteenth two more new ones, and found in the South. Just how much additional matter these might have yielded cannot now be conjectured, but one could not reasonably expect more than 250 *granthas*, if indeed these sections really had a separate existence.

It is possible to show by internal criticism that missing passages are indicated in certain contexts. Shama Sastri's indispensable word-index to the *Arth.* (3 vols., Mysore 1924–25) records 78 places where the author refers to himself with the specific emphasis *iti Kauṭalyaḥ*. The reason for this underlining of his own name is clear, because the adjoining text cites other authorities of the science either by name, or together in a group as *ity ācāryāḥ*; and the opinion qualified with Kauṭalya's name differs from the others in important particulars, or contradicts them all flatly. Only in three of the 78 cases does *iti Kauṭalyaḥ* occurs without any other *ācārya* or contrary views in the context. The presumption is therefore very strong that in these cases (namely in 3.4, 7.15, and 13.4), some other opinions .

have been lost from the original composition. That the name of an authority, even of Kauṭalya himself, could drop out along with the maxim is proved by the sentences reported as additive variants to Shama Sastri's text of 8.1 and 8.2 (pp. 324, 325 of his edition); the extra quotations appear as part of the main text in the edition by T. Ganapati Sastri. This precisely illustrates my thesis that the text has been steadily whittled down by inadvertent negligence in successive transcription.

One of these rare, solitary Kauṭalya citations does not appear in Shama Sastri's index namely, that in 1.7. However, it occurs in that part of the southern text which is covered also by the northern fragment, and is well worth discussing for that reason. In 1.7, the southern texts agree in giving the sentence: *artha eva pradhānaḥ iti Kauṭalyaḥ; artha-mūlau hi dharma-kāmāv iti*. North drops out the first half, before our semicolon; neither version fits the context at all well. The *iti* here indicates what is left of a quotation, so that South is more plausible, but the source might not be Kauṭalya himself. The phrase after the semicolon appears again in 8.3, but as part of a quotation from the Parāśara school, to which Kauṭalya is there strongly opposed; it is cited anonymously as a type of maxim in 15.1. The text that precedes the quotation in 1.7 absolutely requires (and appears disjointed for lack of) some discussion of *dharma*, *artha*, and *kāma* (say: ethics, economics, erotics) in relation to each other. In both North and South, haplography is indicated; the scribe's eye must have jumped to the word *artha* repeated further on. The mark of such a happening indicates that very few manuscripts of the work existed at that time. This illustrates once again the effect of long disuse and fading away of the level-headed, frankly treacherous, and realistic theory of prefeudal statecraft.

One may feel tempted to make a similar conjecture about the tenth book, where it seems to me that tactical considerations: *patty-aśva-ratha-hasti-karmāṇi* are not sufficiently developed in the southern text that now survives. The main reason would be that the structure and purpose of the army changed. The word *patti* means the heavy-armed soldier of the line, a hoplite, in the *Arth.*, but a combined squad in later works. New tactical units such as the *gulma* (which only means thicket or wharf in the *Arth.*) made up of combined arms were used also for policing the countryside from Sātavāhana times. This has been argued elsewhere.[8] The only guide we have at present outside the text itself is Kāmandakī's *Nītisāra*,[9] written under the influence of Cāṇakya's work. But this is rather dangerous as a guide because both tone and content show how the basis of society and of the state had developed, and the extent to which the great Magadhan *arthaśāstra* tradition had fallen into desuetude. The trivial verses variously ascribed to Cāṇakya under the titles: *Cāṇakya-nītisāra, vṛddha-Cāṇakya*, etc., mark the penultimate stage to complete oblivion.

It may at least be said that Muni Jinavijayaji's edition, even of so tiny a portion of the northern text, will be a stimulus to be internal criticism of the *Arth.*, a task very well worth the attempt and one which must soon be undertaken.

NOTES

1. R. Shama Sastri, 1st ed. (Mysore, 1909); 2nd ed. (1919); 3rd (1924). T. Ganapati Sastri (Trivandrum, 1923–5; in three parts, with a commentary, Trivandrum Sanskrit Series, 79, 80, 82). J. Jolly and R. Schmidt (Lahore, 1923–5). The fine German translation by J.J. Meyer (Leipzig, 1926) deserves special mention.
2. In the Tanjur Catalogue by M. Lalou; but no analysis of the specific text is available to me.
3. J. Brough, *The Early Brahmanical System of Gotra and Pravara* (the *Gotra-pravara-mañjarī* of Puruṣottama) (Cambridge, 1953), pp. 82, 88, 96 (Bhṛgus); 107, 109 Gautamas; a Kulkarni family with this *gotra* was reported by V.T. Shete: *Śukla-Yajurvedīya-Mādhyandina brahmaṇāṃcī gotrāvalī* (in Marathi), 2nd ed. (Poona, 1951), p. 33.
4. Keith A.B., *A History of Sanskrit Literature* (Oxford, 1928; photo-reprint, 1941), pp. xvii-xx, 458–62; see also, Jolly's preface to the Lahore edition, and M. Winternitz, *Geschichte der Indischen Literatur*, III, 518 ff., for doubts as to the authenticity; see also note 8, below.
5. V S. Sukthankar, *Memorial Edition* (Bombay, 1944), vol. I, pp. 10–140, from his edition of the *Ādi-parvan* (*BORI*, critical edition, vol. I, Poona, 1933).
6. W. Ruben: *Studien zur Textgeschichte des Rāmāyaṇa* (Stuttgart, 1936). See also, the Bhartṛhari edition by D.D. Kosambi, Singhi Jain Series, no. 23.
7. D.D. Kosambi, 'The Parvasaṃgraha of the Mahābhārata,' *JAOS*, 66 (1946), 110–117.
8. D.D. Kosambi, *An Introduction to the Study of Indian History* (Bombay, 1956), pp. 76–8; for the *Arth.* state, ibid., pp. 199–226.
9. *Nītisāra of Kāmandakī*, ed., T. Ganapati Sastri, Trivandrum Sanskrit Series, No. 14 (1912).

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The *Cintāmaṇisāraṇikā* of Daśabala*

INTRODUCTION

The most interesting stanza of the empirical calendar printed herewith (for the first time) is 15 of the final section, which reads without emendation:

> श्रीभोजे चतुरर्ण्णवां कलयति प्रौढे तदोष्णा भुवं
> वि(वे)ख्याते भुवि रत्नः(त्रः) संभवलघुवैरोचनेर्व्वालभः ।
> गोलग्रंथविदां वरो दशबलः संस्मृत्य सौधोदनिं
> बोधव्यामणुबुद्धिभिर्व्विहितवांस्तथ्यां तेथेः सारणं(णीम्) ।। १५ ।।

The custom of Indian astronomical writers of working from the current year dates our author, for he bases his calculations on śaka 977 (1.15, 4.1, 6.1) as the initial point. This began on March 1–2, AD 1055 according to L.D. Swamikannu Pillai's *Indian Ephemeris* (vol. iii, Madras 1922). Thereby, we obtain two interesting byproducts.

The first is that Bhoja still ruled from ocean to ocean in 1055. The locative absolute and the present tense leave little doubt. This identifies the king as Bhoja Paramāra of Dhārā, the great Bhoja who left so deep an impression upon classical Sanskrit literature in its last great phase. The Paramāra copper-plate grants are dated in *saṃvat* years which began in *kārttika*, not *caitra* like the śaka years. For, Bhoja speaks (*Indian Antiquary*, vi, 1877, pp. 54–55) of making a land-grant in *caitra* of saṃvat 1078 after having conceived the idea in *māgha* of the same year. The first known grant of Bhoja's successor Jayasiṃha Paramāra is dated at Dhārā, as on *āṣāḍha vadi* 13, of saṃvat 1112, which is June 24–25, AD 1056.

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*Supplement to *Journal of Oriental Research*, vol. 19, pt 2 (1949–50).

The final years of Bhoja's reign are supposed to have been disturbed by an invasion led by the kings Karṇa Kalacuri and Bhīma Soḷaṅkī, who took Dhārā just after Bhoja's death.[1]

The question is whether Bhoja was alive when Jayasiṃha made the grant, and secondly whether the sack of Dhārā could have taken place within the sixteen months to which our evidence restricts us. The latter is most unlikely, particularly as one of the invaders is supposed to have been the Soḷaṅkī king, a neighbour of our author Daśabala, as it were. There is nothing to lead anyone to believe that Jayasiṃha could make land-grants from Dhārā, saluting Bhoja along with other ancestors, in the same style, if Bhoja had been alive. The conjecture comes from some negligible poetic references, and from Udayāditya claiming to be Bhoja's successor in saṃvat 1137. But the reason for this is quite clear, namely, that the invasion and defeat occurred during the inglorious reign of Jayasiṃha. The traditional season for campaigning is just after the rains have stopped; the period between October 1055 and June 1056 hardly leaves time enough for the capture of the capital and Jayasiṃha's re-establishment on the throne. One would be justified in concluding that Bhoja had died just before June 1056, when hostilities were expected or had commenced, but that the major actions of the war were fought later.

The second conclusion derived from the *Cintāmaṇisāraṇikā* needs some emendation of the second line of the stanza. As taken in my final text, it indicates that the author was an inhabitant of Valabhī, the younger brother of Ratnasaṃbhava (in both of which I have the support of the commentator), and had a patron or *guru* or progenitor named Vairocana. Both personal names are famous in the Māhāyāna Buddhist tradition, as is Daśabala; the title *mahākāruṇikabodhisattva* and the reverent phrase *saṃsmṛtya śauddhodanim* leave no doubt as to the author being a Buddhist. On the other hand, his tag line (1.62) *ākrīḍante tridaśaramaṇītuṅgapīna-staneṣu* is hardly the ascetic Buddhism of Gotama, and the dedication to Śāradā reminds us of Harṣa's *Nāgānanda*, with its Buddhist theme surcharged with Gaurī worship. In any case, there survived Buddhist families near Bhavanagar in the eleventh century, probably because they had come to terms with Śaivism.

The work was first known through Theodor Aufrecht's catalogue Bodleian Sanskrit MSS. (viii, Oxford, 1864) p. 327 *b*, No. 776. Aufrecht's meticulous report that the author was a Buddhist who wrote during the reign of Bhoja of Dhārā, with a date probably śaka 977, went unheeded in the absence of systematic Indian epigraphy, which was then just beginning. A second MS. of the work was found by P.K. Gode at the Rajapur

Pāṭhaśālā; it was he who suggested the editing of the text. His photographs and the microfilm supplied by the Bodleian library form the basis of the text. The Rajapur codex is older, being dated *āṣāḍha śuddha* 2 of saṃvat 1558,[1] and by far the more intelligently transcribed, but lacunary, having lost its initial folio, and being in a badly wormeaten condition. The Oxford copy is dated *kārttika śuddha* 4, of saṃvat 1596,[2] and in good condition, though the scribe was a professional who didn't know what he was copying. Both undoubtedly derive from the same source, as they show the same omissions, identical mislections, and reduplications. It further seems to me that the Oxford codex is a direct copy of the Rajapur MS. for the scribe repeats some slips of the other, without noticing the minute cancellation marks above the wrong letters; also, in 5.3, the final devowelizing stroke on the preceding *pṛthak* has been mistaken to be a *mātrā* on the line below, to give the word *aiṣa*, which is actually the appearance of the Rajapur copy at a hasty glance. Unless the Rajapur scribe managed to duplicate the common model letter for letter and line for line, the Oxford copyist must have been directly influenced by him.

Thus, these two copies supplement each other only to the extent of giving a single somewhat corrupt manuscript. The text has necessarily to be emended, which was done with the powerful aid of my friend Prof. Dr V.V. Gokhale. The scribes were Gujarāti, as shown by the regular substitution of *sa* for *śa*, interchange of *kha* and *ṣa*, writing *kṣunna* for *kṣuṇṇa* and an occasional *anusvāra* before a following nasal, as *bāṃṇa*. These and other slips of the type have been silently emended. Extra letters to supply the gaps have been inserted in square brackets. Plenty of doubtful readings have been left as they were, either because I do not know the correct reading, or because the emendation is necessary. One real gap still remains after 2.8, which we have not even attempted to supply.

From information supplied by Dr V. Raghavan of the Madras University—an essential step in any modern Sanskrit text criticism, as his Catalogus Catalogorum has already become indispensable to all workers in the field—a commentary on the work was discovered. This is MS. No. 9518 of the Baroda Oriental Institute's collection. The commentator was one Mahādeva, son of Acyuta Lūṇiga. The colophon reports the work to have been composed in śaka 1180, which is amply confirmed by an example worked out for that year. The actual copy is dated saṃvat 1495, śaka 1360, by the hand of a Vaiṣṇava scribe Mahādeva. This scribe uses pṛṣṭhamātrās so unintelligently, in marked contrast to the original text, and makes his *na* so close to the Maharastrian, that he may be taken as from Maharastra. But the commentator himself was a Gujarat man. The name Lūṇiga would seem to prove this, for we know of a Lūṇigadeva, father of the Vāghelā hero Vīradhavala, whose name is also variously reported as Lūṇapasāū, Lūṇapasāja, Lavaṇaprasāda, and Lāvaṇyaprasāda; of course, place names like Lūṇāvāḍā still remain in Gujarat. This shows that the whole of Daśabala's tradition was confined to Western India, as is natural. For, the Islamic conquests made it difficult to spread his methods in Bhoja's former empire, and the Mohammedans, in any case, could utilize the work of a great contemporary of Daśabala, namely, Al Birūnī, who had mastered both Greek and Indian methods, along with Arabic contributions thereto. In the south, the Siddhāntaśiromaṇi naturally took its place at the head of Indian works. Daśabala gives nothing of any theoretical importance, which is the reason why his calculation methods for finding the tithi, nakṣatra, additional month, etc., could not match the Sūryasiddhānta tradition.

This is one reason for not making much use of nor publishing the commentary, which I have nevertheless copied out in full. The text is very badly written, and the paper in poor condition, with the first folio again missing, the folios to seven written in a different hand from the rest, and many other folios so badly worn as to be often illegible. The final folios are even worn through completely in spots, which in any case proves that the copy and the system had been used heavily in calculations. Mahādeva supplies no new details about Daśabala, is ignorant about Buddhism, which he doesn't mention at all, and glosses the text without quoting it in full, or even quoting it extensively. Though he refers often to Brahmagupta, Vairocana is taken as 'son of Virocana', to apply to Daśabala himself, without explaining the locative absolute.

It follows from the inflection of both components that the title of the present work is 'the sāraṇikā named *Cintāmaṇi*'. The phrase *yoginām apy agamye* may be derived from Bhartṛhari.

The *Cintāmaṇi-sāraṇikā* finds no mention in S.B. Dikshit's Marathi history of Indian astronomy, but another work of Daśabala is mentioned there (*Bhāratīya Jyotiṣa Śāstrācā Itihāsa*, 2nd. ed., Poona 1931, ps. 239–40), namely, the *Karaṇakamala-mārtaṇḍa* (KKM). Dikshit noticed that the KKM follows the Brahmasiddhānta, with close points of contact with Bhoja's Rājamṛgāṅka-karaṇa, and praiseworthy tabulated methods of rapid computation. All of this might equally well have been said of the *Cintāmaṇi*. But Dīkṣita's conclusion that Daśabala was a king of the Valabhī dynasty seems to me unjustified, being based only upon KKM 10.10:

वलभान्वयसंजातो विरोचनसुतः सुधीः।
इदं दशबलः श्रीमान् चक्रे करणमुत्तमम् ॥ १० ॥

The actual MS of the KKM (20 of 1870–71, at the Bhandarkar Oriental Research Institute, Poona) is a clear though comparatively late copy of a defective codex with pṛṣṭhamātrās. I feel justified in taking the real reading to have been Vairocana-sutaḥ. We must now agree with Mahādeva that Vairocana (not Virocana) was Daśabala's father. But Valabhānvaya need not mean king of Valabhī, or descendant of such a king; descent from any prominent citizen of Valabhī would suffice.

The KKM is dated śaka 980, all its calculations being based upon that year. There are no bright tag-verses such as those found in the *Cintāmaṇi*, for any of the ten KKM colophons; nor any mention of Bhoja, nor of any other king, nor of Buddhism. Yet the identity with our Daśabala is not in doubt, for the stanza above is followed by our 6.16 with slight variations, and preceded by the identical 60-year cycle of saṃvatsara names in the same stanzas. Some of the KKM colophons say that it was 'part of Daśabala's *jyotiḥ-śāstra*', which would, if taken seriously, indicate a larger work, or at least a larger scheme of which nothing else is hitherto known. The soberer style could denote less discriminating patronage, following the death of Bhoja, just three years after the earlier work.

It is a great pleasure to express my gratitude for the valuable emendations suggested by Dr V. Raghavan, and for his indispensable help with the proofs.

॥ चिन्तामणि - सारणिका ॥

॥ महाकारुणिक - बोधिसत्त्व - दशबल - विरचिता॥
॥ॐ नमो श्रीगणेशाय नमः ॥
॥ ॐ नमः सूर्याय ॥

नमोऽस्तु ते पार्वति पङ्कजानने प्रियंवदे वन्द्यमुनीन्द्रवन्दिते ।
दयापरे सुन्दरि शङ्करप्रिये कुरु प्रसादं मम देवि शारदे ॥ १ ॥

पुराचार्यैरेतैर्न खलु विहिताः स्वल्पविधिना
निजग्रन्थे ह्यन्तः स्फुटतिथिभयोगप्रभृतयः ।
अतः पश्यन् विश्वं गणितगहनोद्विग्नमधुना
नमस्कृत्यार्केन्दू दिशति तदुपायं दशबलः ॥ २ ॥

एकक्षणात् कृतपरिस्फुटलक्षसङ्ख्य-
नक्षत्रयोगतिथिबन्धुरसंविधानाम् ।
पीयूषवृष्टिमिव हृष्ट(ष्टि) करीमजस्रं
मत्सारणीं श्रुतिपुटैः कृतिनः पिबन्तु ।। ३ ।।

(अथ तिथिप्रकरणम् ।। १ ।।)

तिथिप्रभृतिविज्ञानात् सम्यक् यात्रादि सिद्ध्यति ।
अतस्तत्सारणीं ब्रूमश्चिन्तामणिमिमां स्फुटाम् ।। ४ ।।

चत्वारिंशत्सहाष्टाभिस्तिथीनांशे चतुःशतैः (४४८) ।
चतुःपञ्चाशता युक्तं नक्षत्राणां शतत्रयम् (३५४) ।। ५ ।।

चत्वारिंशद्विनैकेन चतुर्भिरच्चिका शतैः (४३९) ।
योगानां पद्धतिः सैषा स्वसङ्ख्यातुल्यकोष्टकैः ।। ६ ।।

वारनाडीविनाडीभिरधोऽधः सूचितक्रमैः।
तिथिनक्षत्रयोगानां पिण्डाष्टाविंशतिस्त्रिधा ।। ७ ।।

लक्ष्यते या धनर्णाक्षैः कोष्टकस्थैः पलादिभिः।
पिण्डनाडीफलोत्पत्त्यै सष्टार्थं रविकासु च ।। ८ ।।

शरा (ङ्गा) ग्रिमिताः (३६५) कोष्टा रविकाणां पृथक् पृथक्।
तिथेर्योगस्य च क्षेपाः स्वर्णनाड्यादि चिह्निताः ।। ९ ।।

मीनान्तमध्यमोष्णांशोः प्रवृत्ताः प्रतिवासरम्।
भुजाफलस्य यातस्य चरार्धस्य च कोष्टकाः ।। १० ।।

तावन्तो निखिला स्वर्णघटिकादिभिरन्विताः।
ज्येष्ठमध्यकनिष्ठादीन् परिवर्तान् प्रचक्ष्महे ।। ११ ।।

ध्रुवयोर्धिष्ण्ययोगानां पिण्डाभावस्य सिद्धये।
एतेषामेव संबन्धाः स्थिता वारध्रुवा निजाः ।। १२ ।।

तिथिनक्षत्रयोगानां प्रतिबद्धाः पृथक् पृथक्।
कदाचित् सर्वथा शून्यं जायते पिण्डकध्रुवः ।। १३ ।।

कदाचिद्विकलेनाद्यो गम्येन च गतेन च।
तिथ्यादिरित्थमामूलप्रवृत्ताः कोष्टकास्त्रिधा ।। १४ ।।

शाकः स्वरहयाङ्को नः (९७७) क्षुण्णः पक्षः शरैः (५२) पृथक्।
क्ष्माङ्कद्विपनृपाप्तो नः (१६८९१) सिद्धाढ्यः (२४) क्ष्मानखैर्हृतः (२०१) ।। १५ ।।

दिनादिः स्यात् पृथक् साब्दः सैको वारध्रुवः स्मृतः।
पद्मिनीबन्धुवारादिरजादौ मध्यमे रवौ ।। १६ ।।

ततोऽब्दौघः शिवः (११) क्षुण्णः पृथक् द्विस्थोदिगा (१०) हतः ।
शैलामराक्ष (५३३७) लब्धाढ्यश्चक्षुर्मुनिभिरन्वितः (७२) ।। १७ ।।

नभोऽत्यष्ट्यंश (१७०) संयुक्तस्तत्त्वयुक् (२५) त्रिंशता (३०) हृतः ।
यल्लब्धमधिमासा स्युः शेषं शुद्धिः प्रकीर्तिता ।। १८ ।।

खं (०) रूपं (१) द्वौ (२) त्रय (३) श्चान्द्री शुद्धियदि तु जायते ।
व्येकास्तदाधिमासा स्युः शुद्धिस्तु त्रिंशता (३०) धिका ।। १९ ।।

शुद्ध्या यातुर्तुभिर्हीनश्चैत्रादितिथिसंचयः ।
अब्दमध्येऽधिमासश्चेत्तद्याततिथिभिर्युतः ।। २० ।।

शुद्धौ सत्यां स चेदल्पः प्रदेयः शुद्धितस्तदा ।
शेषं च पञ्चषट्त्रिभ्यः (३६५) पात्यं शिष्टमहर्गणः ।। २१ ।।

चरार्धरविकायातभुजाफलकृते कृतः ।
वर्षौघः पूषभिः (१२) क्षुण्णः साधिमासः खवह्निभिः (३०) ।। २२ ।।

हतश्चैत्रादितिथ्याढ्यस्तिथिसिद्ध्यै तिथिव्रजः ।
स्वचतुःषष्टि (६४) भागोनश्चैत्रादितिथिसंचयः ।। २३ ।।

विभुक्तविकलेनैष समवेतोदितादिता ।
अब्दक्षुण्णाक्षषट्त्र्याढ्यः (३६५) शुद्ध्यूनोऽङ्काभ्रभूयुतः (१०९) ।। २४ ।।

वर्तमानभयोगाभ्यां गुरुवाराद्यहर्गणः ।
तिथीनां संचयोऽधस्थः स्थाणुभिः परिताडितः ।। २५ ।।

मार्गणाग्निरसोपेत (६३५) स्त्र्यभ्रशैलास्त (७०३) वर्जितः ।
सिन्धुसिन्धुर (८४) संयुक्तः कथ्यते द्युगुणोऽथ वा ।। २६ ।।

वारक्षेपोऽब्धयः पञ्चवसुवेदा (४, ५, ४८) स्तिथेः स्मृतः ।
पिण्डप्रभृतयः शून्यमृक्षाणि शरबाहवः (०, २७, २५) ।। २७ ।।

स्तम्बेरमं चतुर्वेदै (४४८) स्तष्टव्यस्तिथिसंचयः ।
लब्धं तु तत्क्षणं नाम शिष्टं कोष्टकसम्मितिः ।। २८ ।।

ऋणं वारोदयोऽभ्रं खमक्षरामाः कुसायकाः (० ऋ, ०, ३५, ५१)
पिण्डप्रभृतयः शून्यं शैला नव दृशोधनम् (०, ७, ९ धन, २) ।। २९ ।।

आभ्यां तक्षणनिध्नाभ्यां प्रक्षेपौ हीनसंयुतौ ।
वारध्रवोऽर्कवाराद्यः पूर्णाद्यः पिण्डकः ध्रुवः ।। ३० ।।

ध्रुवपिण्डप्रमातुल्यतिथिभिः परिताडिताः ५ ।
वक्ष्यमाणाः क्रमादेते वाराद्या व्योमगोशराः ।। ३१ ।।

त्रयः शून्यं सरिन्नाथाः (०, ५९, ३, ४०) पिण्डप्रभृतयः पुनः ।
भूरभ्रं व्योममुन्यर्था (१, ०, ०, ५७) इतिराशिद्वयं कृतम् ।। ३२ ।।

वारपिण्डध्रुवाभ्यां तत्पिण्डाभावाय पातयेत् ।
शिष्टकोष्टमितौ योज्यास्तिथयः पिण्डसम्मिताः ।। ३३ ।।

परिवर्तोऽत्र चेद्धावां(नां) विधिः प्राग्वद्ध्रवेत्तदा ।
इति वारध्रवो यश्च पिण्डानां ध्रुवकश्च यः ।। ३४ ।।

तिथिकोष्टमितिर्यावद्व्यवहर्तुममी कृताः ।
वारध्रुवोऽयमारभ्यः शिष्टकोष्टकसम्मितिः ।। ३५ ।।

तिथिकोष्टैर्युतः शिष्टैर्भोगः स्यादस्फुटस्तिथेः ।
स्वम्बेरमकरै (२८) स्तष्टा शेषकोष्टकसम्मितिः ।। ३६ ।।

स्वाष्टाविंशतिसबंधाः शिष्टं कोष्टाः प्रकल्पयेत् ।
पलैश्च रविकाक्षुस्तैः(ण्णैः) स्वाष्टाविंशतिकोष्टजैः ।। ३७ ।।

धनर्णाक्षैर्युता न्यूना रविकाः स्युः परिस्फुटाः ।
आभिरेव धनर्णाक्षरविकाभिश्च संस्कृतः ।। ३८ ।।

भुक्तपिण्डघटीक्षुण्णैः स्वाष्टाविंशतिकोष्टजैः ।
पलाद्यैः संस्कृतश्चैष तिथिभोगः स्वखण्डवत् ।। ३९ ।।

भुक्तपिण्डघटी त्रिंशदधिका वेत्रसंस्क्षरेत् (संस्कृता ?) ।
भोग्याभिस्तत्र नाडीभिर्धनर्णाभ्यां विपर्ययः ।। ४० ।।

चरार्धं पञ्चभिर्भक्तं कोष्टकस्थं पलादि यत् ।
इष्टाक्षप्रभया क्षुण्णं स्वदेशे तन्निगद्यते ।। ४१ ।।

तेन स्वर्णवशात् सार्धमध्यसंबन्धिभिः पलैः ।
भुजाफलस्य जातस्य विनाडीभिश्च संस्कृताः ।। ४२ ।।

इति नाड्यादिकस्पष्टस्तिथिभोगः खगोदयात् ।
सौम्येतरदिशोर्यान्तैर्निजषड्भागवर्जितैः ।। ४३ ।।

योजनैरुज्जयिन्याश्च षट्खाक्षि (२०६) सहितोज्झिताः ।
खाब्धिभक्ताः (४०) फलं यत्तत्पलच्छायाङ्गुलादिगा (१४३) ।। ४४ ।।

तद्वर्गात् सूर्यवर्गाद्या (१४४) न्मूलमक्षश्रुतिः स्मृता ।
षट् (६) क्षुण्णाद्विषुवत्कर्णात् स्वदेशान्तरयोजनैः ।। ४५ ।।

अन्यस्तादभ्रदिग्भक्ता (१००) द्विनाड्यादिफलं विदुः ।
लंकावन्तीकुरुक्षेत्ररेखायाः पूर्वपश्चिमे ।। ४६ ।।

देशान्तरतया स्वर्णं वशतः प्रत्यहं दिशोः (ः ?) ।
द्विघ्नस्तिथिस्त्रिरेकः सन् करणान्यद्रि(धि ?) तिष्ठति ॥ ४७ ॥

बवंबालवमाचार्याः कौलवं तैतिलं गरम् ।
वणिजं विष्टिरेतानि करणानि प्रचक्षते ॥ ४८ ॥

आद्यं शकुनिसंज्ञं स्याद् द्वितीयं स्याच्चतुष्पदम् ।
नागाह्वयं तृतीयं स्यात् किंस्तुघ्नं स्याच्चतुर्थकम् ॥ ४९ ॥

स्थिराण्येतानि बहुले चतुर्थस्योत्तरार्धतः ।
अथ तिथ्यर्धभोगाय तिथिभ्यो भोगजन्मनाम् ॥ ५० ॥

गतगम्यान्तरार्धेन युक्तो नाखाग्नि (३०) नाडिकाः ।
गताद्गम्येऽधिके न्यूने भुक्तिः स्यात् करणेषु च ॥ ५१ ॥

प्रवृत्तिश्च निवृत्तिश्च तया तेष्वेव साध्यते ।
त्रिंशच्च (३०) रार्धनाडीभिर्द्वैध्नीभिः संस्कृता दिनम् ॥ ५२ ॥

द्युमानः स्यात्तदूना तु षष्टिर्मानं निशां प्रति ।
स्वदेशनाडिकापूर्वं चरार्धं वाध्वनः फलम् ॥ ५३ ॥

तुल्ययोः स्वर्णयोरैक्यमनैक्यं स्यादतुल्ययोः ।
निर्दिष्टस्वर्णकालाभ्यां कृत्स्ना वारप्रवृत्तयः ॥ ५४ ॥

स्वदेशेऽर्कोदयस्याग्रात् पृष्ठाच्च परिकीर्तिताः ।
समं चार्कोदयेनैव क्षि(क्ष) पाचरपतेः पुशि (पुरि) ॥ ५५ ॥

अवमं तत्स्पृशत्येकोयत्र वारस्तिथित्रयम् ।
तिथिश्च यत्र वारांस्त्रास्त्रिदिनस्पृक् तदुच्यते ॥ ५६ ॥

निजध्रुवकजाः पिण्डनाड्यो द्विस्थाः समाहताः ।
स्वाष्टाविंशतिखण्डानां पलाद्यैः स्वर्णशालिनाम् ॥ ५७ ॥

यतोऽथ खण्डविश्वे(श्ले) षदलेन व्योमषट् हताः ।
लब्धेन हीनसंयुक्तं तदैक्यार्धं यथाक्रमम् ॥ ५८ ॥

भोग्यादभ्यधिकोनं तु तद्भोग्यं खं स्फुटं विदुः ।
अनेन स्पष्टखण्डेन रविकाः पिण्डनाडिकाः ॥ ५९ ॥

नीताः स्पष्टत्वमथवा योग्याः (स्युः) तिथिभयोगयोः ।
विदित्वेत्थं तिथेः स्पष्टां सारि(र)णीं निखिलो जनः ॥ ६० ॥

सूर्याचन्द्रमसोर्लोकान् दीर्घमासाद्य मोदय(ते) ।
कोष्टबद्धावुभौ यस्मात् सूर्याचन्द्रौ परिस्फुटौ ॥ ६१ ॥

एतां सम्यग्दशबलकृतां सारणीमर्थसारां
ज्ञानज्योतिःकुमुदकलिकां कर्णयोर्ये वहन्ति ।
ते भुक्ते (क्त्वे) न्दुद्युमणिवसती योगिनामप्यगम्ये
आक्रीडन्ते त्रिदशरमणीतुङ्गपीनस्तनेषु ।। ६२ ।।
इति महाकारुणिक-बोधिसत्त्व-
दशबल-विरचितायाम् चिन्तामणौ सारणिकायां
तिथिप्रकरणं प्रथमं समाप्तम् ।।
(अथ नक्षत्रप्रकरणम् ।। २ ।।)

द्युगणः पृथगष्टिघ्नां (१६) काक्षविश्वाप्तवर्जितः (१३५९) ।
नक्षत्रौघः ससिद्धाढ्यस्तष्टस्तुरगबाहुभिः (२७) ।। १ ।।

अवशिष्टं भवेद्धिण्यम् (?) अश्विन्यादियथाक्रमम् ।
भानां वारादयो वेदाः कुम्भिनः सशरास्त्रयः (२, ४, ५८, ३) ।। २ ।।

पिण्डाद्या भानि गोबाणा नयने क्षेपकौः(के) स्थिरौः(रे) (२७, ५९, २) ।
ज्यायान् भ-परिवर्तः स्याद्भूरामश्रुतिपावकैः (३४३१) ।। ३ ।।

वारादौ षड्भुजाक्षाणि स्वर्गिणः खसुधाकराः (६, ५२, ३३, १०) ।
पिण्डादयोऽभ्रमभ्रं च काष्ठाविशिष(ख) बाहवः (०, ०, १०, २५) !। ४ ।।

मध्यमः परिवर्तोऽयं चतुःपञ्चत्रिभिः (३५४) स्मृतः ।
वारादयः शशी विश्वे लोचने वसुसिन्धवः (१, १३, २, ४८) ।। ५ ।।

पिण्डाद्या गगनं व्योमखगुणाः शैलपाणयः (०, ०, ३०, २७)
कनिष्ठः परिवर्तस्तु शिलीमुखचतुःकरैः (२४५) ।। ६ ।।

वाराद्या द्वौ शराक्षाणि मुनयः करसायकाः (२, ५५, ७, ५२) ।
पिण्डाद्या भानि बाणाक्षाण्यङ्गरामानभः कराः (२७) ।। ७ ।।

परिवर्तो महाज्येष्ठच्छिद्रानलनवग्रहैः (९९३९) ।
वारादयोऽप्सराः सिद्धाः षट्त्रयो मुनिवह्नयः ।। ८ ।।

पिण्डाद्या गगनव्योमव्योमद्विरदसागराः ।
नंध (२७, ५५, ३६, २०) दचन्द्रा पञ्चेषवो रसाः ।। ८ ।। (?)

पिण्डप्रभृतयः खेन्दो(दू) भूजिनाः शरसागराः (०, १, २४, ४५) ।
परिवर्तैः क्रमात् स्वैः स्वैस्तत्क्षेत्रक्षत्नसंचयम् ।। ९ ।।

प्राप्तं तत्क्षणमुद्दिष्टं शिष्टं कोष्टकसम्मितिः ।
ये स्वीयपरिवर्तेषु वारपिण्डाः प्रकीर्तिताः ।। १० ।।

स्वस्वतक्षणनिध्नास्ते प्रक्षेप्याः क्षेपकस्थिरे ।
वाराद्यः पिण्डकाद्यश्च ध्रुवकः स्यात् पृथक् पृथक् ।। ११ ।।

वारध्रुवेण योक्तव्याः कोष्टास्तच्छेषसम्मिताः ।
भवन्त्याकोष्टपर्यन्तमिमे भोगाः सुधान्वि(त्वि)षः ।। १२ ।।

स्वपञ्चत्रिंशदंशाढ्यं (३५) शेषं कोष्टकसम्मितिः ।
तष्टानागाश्विभिः (२८) शेषं पिण्डाष्टाविंशतिः स्वकाः ।। १३ ।।

तत्पलैस्त्रिहताः पिण्डनाडिकाः स्युर्विनाडिकाः ।
आभिश्च संस्कृता भोगाः स्वाष्टाविंशतिकोष्टवत् ।। १४ ।।

पिण्डयातासु नाडीषु गम्यासु पुनरन्यथा ।
चरार्धस्य विनाडीभिर्देशान्तरपलैः सह ।। १५ ।।

भुजाफलपलैर्जातपरपि(ण्डाश्च) संस्कृताः ।
परिशिष्टा भवन्त्येव महापुरिद्दढोदयात् (?) ।। १६ ।।

नक्षत्रयोगपिण्डानां गतागम्याश्च नाडिकाः ।
चतसृणां विधातव्या मध्यदेया न या दिशाः ।। १७ ।।

ज्येष्ठमध्यकनिष्ठादि पिण्डानां परिवर्तनैः ।
एतद्वशेन वाराणां मन्ये या परिवृत्तयः ।। १८ ।।

इति नक्षत्रविज्ञानादिह प्राप्यौ(प्यो) जितश्रियम् ।
लोके हिममयूखस्य स्थितिं बध्नात्यनीश्वराम् ।। १९ ।।

इति महाकारुणिक-सत्त्वबोधि ! दशबलविरचितायां चिन्तामणौ सारणिकायां नक्षत्रप्रकरणं द्वितीयं समाप्तम् ।।

(।। अथ योगप्रकरणम् ।। ३ ।।)

द्युगणोऽधः शिवक्षुण्णः (११) सप्तशैलेन्दुभिर्हतः (१७७) ।
लब्धेनोपरिमो (?) युक्तो जायते योगसंचयः ।। १ ।।

सषोडश (१६) युतः शैललोचनै (२७) रवशेषितः ।
योगाविष्कम्भपूर्वाः स्युः स्थिरक्षेपोऽथ कथ्यते ।। २ ।।

क्रमाद्वारादिको वेदा गिरिबाणाः शराब्धयः (४, ५७, ४५) ।
पिण्डाद्यस्तुरगाक्षाणि वसुबाणाः कृताब्धयः ।। ३ ।।

परिवर्तो भवेद्योगैर्ज्येष्ठोऽष्टाङ्गयुगर्तुभिः (६४६८) ।
वाराद्याः षट् सुपर्वाणः स(शि)खिचन्द्रा हविर्भुजः (६, ३३, १३, ३) ।। ४ ।।

पिण्डाद्या भानि गोबाणा भूतवाताः खबाहवः (२७, ५९, ५५, २०) ।
मध्यमः परिवर्तस्तु रन्ध्रत्रिमकारालयैः (४३९) ।। ५ ।।

वाराद्यास्तत्र खं कुम्भि चन्द्रास्ताना रसेषवः (०, १८, ४९, ५६) ।
पिण्डाद्या भानि नन्दार्था वेदवारिधयो रसा(:) (२७, ५९, ४४, ६) ।। ६ ।।

कनीयः परिवर्तोऽपि विलोचनदृगग्निभिः (३२२) ।
वारादिर्द्वे नवाम्भोधिगुणा मार्गणपावकाः (२, ९, ३४, ३५) ।। ७ ।।

पिण्डाद्यः पुष्करं त्रीणि शैलरामाः स्वरेषवः (०, ३, ३७, ५७) ।
योगैर्ज्येष्ठतमः कुम्भिछिद्राग्निकृतसिन्धुभिः (४४३९८) ।। ८ ।।

वारादयस्त्रयः शक्राश्चन्द्राक्षाणि स्वराग्नयः ।
पिण्डाद्या भानि गोबाणा नन्दाक्षाणीन्दुबाहवः (३, १४, ५१, ३७) ।। ९ ।।

परिवर्तैः क्रमात् स्वैः स्वैस्तक्षे योगेषु संचयः ।
लब्धं तु तत्क्षणं नाम शिष्टं (२७, ५९, ५९, २१) कोष्टकसम्मितिः ।। १० ।।

संबन्धं परिवर्तानां वाराद्यः पिण्डकादि च ।
निजतत्क्षणसंक्षुण्णाः कुर्यादेकत्र संस्थितिम् ।। ११ ।।

स्थिरक्षेपकसंयुक्तं ध्रुवकः स्यात् पृथक् पृथक् ।
वाराद्यः पिण्डकाद्यश्च शेषं कोष्टकसम्मितिः ।। १२ ।।

प्रारभ्य वारध्रुवकः संयोज्यः प्रतिकोष्टकम् ।
योगभोगाः स्युरेवैते किञ्चित् किञ्चिदसंफुटाः ।। १३ ।।

स्वत्रिदस्रांशरहिता (२३) शेषकोष्टकसम्मितिः ।
तष्टा कुम्भकरैः (२८) शेषं स्वाष्टाविंशतिकोष्टकः ।। १४ ।।

स्वाष्टाविंशतिखण्डेन तिथिवद्रविका निजाः ।
परिस्पष्टा धनर्णाख्यैराभिर्भोगाश्च संस्कृताः ।। १५ ।।

स्वकीयपिण्डनाडीभ्यः स्वाष्टाविंशतिकोष्टकैः ।
धिष्ण्ये यथा तथोत्पाद्य स्वर्णसंज्ञा विनाडिकाः ।। १६ ।।

आभिश्च संस्कृताः कार्या भोगास्ते कोष्टकाः सदा ।
चरार्धस्य विनाडीभिर्देशान्तरपलैः सह ।। १७ ।।

भुजाफलपलैर्जाता पलैरपि च संस्कृताः ।
परिस्पष्टा भवत्येते योगभोगाः खगोदयात् ।। १८ ।।

तिथिनक्षत्रयोगानां भोगास्ते परमार्थतः ।
यत्सिद्धं चन्द्रसूर्याभ्यां तदाद्यन्ता भवत्यमी ।। १९ ।।

चन्द्रसूर्यप्रसादेन दुष्प्राप्यं प्राप्यते नभि (नृभिः) ।
चन्द्रार्कप्राप्तजन्मासौ मयाः तु तिथिसारणी ॥ २० ॥

यद्दच्छं योगानां गतिमधिगतार्थां प्रतिदिनं
    विजानीते सम्यग्गणितसरणौ प्राप्तिपटिगा ।
स सूर्येन्द्वोर्लोकानधिवसति भूयश्च रमते
    वरस्त्रीणां तुङ्गस्तनकलशयोर्मन्मथ इव ॥ २१ ॥

इति श्री-महाकारुणिक-बोधिसत्त्व-दशबल-विरचितायां
चिन्तामणौ सारणिकायां योगप्रकरणं
तृतीयं समाप्तम् ॥

(अथ प्रकीर्णप्रकरणम् ॥ ४ ॥)

शाकोऽगनगनन्दोनः (९७७) सूर्यघ्नो (१२) माससंयुतः ।
द्विस्थो द्विघ्न (४) स्त्रिधाश्वाग्निद्वाढ्ये (२३७) द्यभ्रेषु (५०७) भाजितः ॥ १ ॥

युक्तस्तल्लब्धचन्द्राभ्यां (१) द्व्यक्षक्ष्मा (१५२) प्तशवेन्दुयुक् (१११)
भूहिश्वा (१३१) विहृतः प्राप्तोऽधिमाससहितो गणः ॥ २ ॥

अधिमासस्य यच्छेषस्वाभ्रार्काक्षलवोनितम् (५१२०) ।
तन्मुक्तोऽभीष्टमासघ्नबाणविश्वघटीगणः (१३५) ॥ ३ ॥

पष्ट्याप्तो भध्रुवो भादि स्याद्दर्शान्तेऽर्कचन्द्रयोः ।
नक्षत्रध्रुवकः क्षुण्णो द्वाभ्यां (२) योगध्रुवः स्मृतः ॥ ४ ॥

स पूर्वोक्तगणः क्षुण्णः सप्तार्चिर्जलराशिभिः (४३) ।
द्विस्थोंऽगाहीभचन्द्राब्धीष्वाप्तो (५४१८६८६) नो रसविश्वयुक् ।(१३६) ॥ ५ ॥

तत्षट्खेन्द्रलवो (१४०६) ब्ध्याढ्यो (४) गुण (३) क्षुण्णगणार्धयुक् ।
वारध्रुवो(व)श्च तष्टः स्यात् (७) लङ्कायां तपनोदयात् ॥ ६ ॥

माससंघोऽभ्ररुद्रघ्नः (११०) शरगोद्विरसान्वितः (६२९५) ।
श्रुतीभगिरिविश्वाप्त (१३७८४) स्तिथ्यन्ते पिण्डकध्रुवः ॥ ७ ॥

द्विघ्न (२) मासगणेनाद्योऽष्टाक्षि (२८) तष्टो भवेदसौ ।
तिथेर्वारादिको भोगः शून्यं नन्देषवो गुणाः ॥ ८ ॥

पूर्णनिर्झरिणीनाथाश्चक्षुस्तु दिनरोचिषः (०, ५९, ३, ४०, २, १२) ।
अस्य पिण्डादिको भोगः शीतांशुर्गगनं नभः ॥ ९ ॥

वसुधाधरभूतानि पृथिवीधरबाहवः (१, ०, ०, ५७, २७) ।
भानोर्भप्रभृतिर्भोगो वियद्वेदाधरादृशः ॥ १० ॥

अङ्गभूतानि षड्बाणास्तिथिं प्रति निदर्शिताः ।
इष्टार्कः स्वदशांशोनेष्टतिथ्याद्यः क्षपापतिः ।। ११ ।।

प्रतिमासं भवेद्धोगः (०, ४, २१, ५६, ५६) सदा वारादिकस्तिथेः ।
चन्द्रमाः पृथिवी रामा आकाशश्वसना रसाः (१, ३१, ५०, ६) ।। १२ ।।

पिण्डादि नयने व्योम गजाक्षीण्याब्धिसिन्धवः (२, ०, २८, ४४) ।
ध्रुवे भानां यमौ काष्ठा वस्वक्षाणि फणिद्विकाः (२, १०, ५८, २८) ।। १३

वारादिरेकधिष्ण्यस्य हिमदीधितिरम्बरम् ।
द्विवेदा गुणभूतानि मूर्च्छनाः समुदाहृताः (१, ०, ४२, ५३, २१) ।। १४ ।।

पिण्डादिरेकधिष्ण्यस्य शशिक्ष्माविधुसिन्धवः ।
रसश्रोताश्विनी (स्रोतस्विनी) नाथास्तुहिनांशुशिलीमुखाः (१, १, ४२, ४६, ५१) ।। १५ ।।

योगस्येकस्य वारादिर्गगनं रसमार्गणाः ।
गगनेचरचक्षूंषि मूर्छना गुणसिन्धवः (०, ५६, २९, २१, ४३) ।। १६ ।।

पिण्डादिरेकयोगस्य पूर्णं हयशिलीमुखाः ।
सिद्धा रन्ध्राणि गोचन्द्रा इति भोगाः स्वकाः स्वकाः (०, ५७, २४, ९, १९) ।। १७ ।।

भध्रुवस्वेष्टमासान्ते विकलं पृथगन्वितम् ।
स्वाब्धीभभाग (८४) बाणाग्निभागाभ्यां (३५) तद्विशोधयेत् ।। १८ ।।

वारपिण्डकनाडीभ्यो धिष्ण्यान्ते ध्रुवको भवेत् ।
योगध्रुवस्य विकलं निजाद्रीन्दु (१७) लवोनितम् ।। १९ ।।

स्वाग्निव्द्यंशोन (२३) मन्यत्र वारपिण्डघटीगणात् ।
शोधयेदवशिष्टं तु योगान्ते ध्रुवको भवेत् ।। २० ।।

पिण्डाभावकला प्रोक्ता उत्कृष्टः पिण्डकध्रुवः ।
चतुस्त्रिद्व्येकनाडीषु गम्यासु च गतासु च ।। २१ ।।

ध्रवको धिष्ण्ययोगानां पिण्डाभावात्मकः स्मृतः ।
भूयिष्ठविकलेनापि पिण्डाभावात्मकस्तिथेः ।। २२ ।।

सिन्धुरद्विमितैर्धिष्ण्ये नाड्यस्तु तुरगाब्धयः (४७, ३०) ।
पिण्डानां सदलोपेतास्ता एव धनसंज्ञिकाः ।। २३ ।।

धनं वारेषु खं पूर्णपक्षाः खं श्रुतिसायकाः (०, २०, ०, ५४, ४) ।
भसङ्ख्यैर्भैरिनपलैर्युक्ता नाड्योऽब्धिभूमयः (२७, १४, १२, ऋ) ।। २४ ।।

ऋणं पिण्डेषु वारेषु रसा गगनगेन्दवः ।
स्तम्बेरमभुवः शून्यं क्षेपमाचक्षते धनम् (६, १९, १८, ०, ध) ।। २५ ।।

स्वं नाड्यः स्वाग्निभिर्योगैर्द्व्यब्ध्ययोऽक्षपलान्विताः (३०, ४२, ५, ध) ।
पिण्डेऽब्देतास्तु तारेषु स्वमभ्रं वेदभूमयः ।। २६ ।।

आकाशतटिनीनाथाः प्रालेयांशुप्रभञ्जनाः (०, १४, ५६, धर ४२ ?) ।
गोद्वियोगैः स्मृतिपलैर्युक्ता नाड्यः शरेन्दवः (२९, १५, १८, ऋ) ।। २७ ।।

ऋणाख्याः पिण्डकेष्वेता वारक्षेपोऽथ कथ्यते ।
कृ(ऋ) तवोऽष्टेन्दवो रुद्रा अन्तरिक्षाग्नयो धनम् (६, १८, ११, ३०) ।। २८ ।।

बुध्वा सर्वध्रुवान् स्वांस्तैर्दर्शसंबन्धिनः पुरा ।
तिथिनक्षत्रयोगैश्च पिण्डतुल्यैः समाहृतैः ।। २९ ।।

स्वस्वभोगैरिमान् स्वान् स्वान्भ्रंशयेदथ वर्धयेत् ।
पिण्डाभावो ध्रुवो येन तिथ्यादीनां प्रतीयते ।। ३० ।।

दृष्टपिण्डघटीनां च परिवर्तानुसारतः ।
स्वबुद्ध्या कृशतां कुर्यात् क्षेपैरुक्तैर्भयोगयोः ।। ३१ ।।

आदितः कोंष्टकान् स्वे स्वे तादृग्वारध्रुवान्विताः ।
तिथ्यादीनामिमे भोगा भवेयुरुपरिस्फुटाः ।। ३२ ।।

पूर्ववद्रविकायातश्चरार्धाद्युक्तकर्मणा ।
संस्कृताः स्पष्टतां यान्ति तरणेरुदयात् परः ।। ३३ ।।

यदा पुनर्विलोमेति(न) तिथ्यादीन् कर्तुमिच्छति ।
निजवारध्रुवेभ्यस्तान् कोष्टकान् शोध(ये) त्तदा ।। ३४ ।।

क्रमेण च तथा कुर्यात्स्वपिण्ड(स्य) घटीफलम् ।
उत्क्रमेण यथाकोष्टं चरार्धं रविकादि च ।। ३५ ।।

इति निगदितशेषं सारणीं सारमेत-
    च्छ्रवणपथमुपेतं शश्वदालोचयन्तः ।
इह हि विविधभोगात्(न्) प्राणिनः प्राप्य सम्यक्
    त्रिदिवमथ वसन्तश्चन्द्रलोकं लभन्ते ।। ३६ ।।

इति महाकारुणिक-बोधिसत्त्व-दशबल-विरचितायां
चिन्तामणौ सारणिकायां प्रकीर्णप्रकरणं
चतुर्थं समाप्तम् ।। ४ ।।

(।। अथ संक्रान्त्यानयनभ् ।। ५ ।।)

कृत्स्नस्तिथिध्रुवः प्रोक्तः सार्धं भोगैरनेकधा ।
भूयः संक्रान्तयोऽर्कस्य प्रतीयन्तां पृथ्क पृथक् ।। १ ।।

शाकः स्वरहयाङ्कोनः क्षुण्णः पक्षशरैः (५२) पृथक् ।
क्ष्माङ्कद्विपनृपाप्तोनभूनखै (२०१) र्भाजितः फलम् ।। २ ।।

यत्साब्दसूर्यसंक्रान्तेर्वारादिस्तद्ध्रवध्रुवः ।
एष द्वादशभिः क्षेपैः समायुक्तः पृथक् पृथक् ।। ३ ।।

स्वष्टाः संक्रान्तयः पूष्णो जा(त) स्तस्मादिहोदयात् ।
सप्तविंशतिभिः क्षेपैर्भतुल्यैः प्रतिसंचिताः ।। ४ ।।

(इति) संक्रान्त्यानयनं समाप्तम् (।। ५ ।।)
(अथ संवत्सरानयनम् ।। ६ ।।)

शाकः सप्तस्वराङ्कोन (९७७) स्त्रिस्थः स्मृतिशसंयुतः(?) ।
पञ्चाङ्गाढ्यः (६५) खगोभाग (९०) खकृशानुभि (३०) रन्वितः ।। (१) ।।

तष्टषष्ट्या (६०) गुरोरब्दाः खगोशेषं चतुर्गुणम् ।
मध्यमार्कस्य च क्रान्ताः स्युः प्रयातान्यहानि च ।। २ ।।

प्रभवो विभवः शुक्लः प्रमोदोऽथ प्रजापतिः ।
अङ्गिराः श्रीमुखो भावो युवा धाता तथैव च ।। ३ ।।

ईश्वरो बहुधान्यश्च प्रमादी विक्रमो वृषः ।
चित्रभानुः सुभानुश्च तारुणः पार्थिवो व्ययः ।। ४ ।।

सर्वजित् सर्वधारी व विरोधी विकृतः खरः ।
नन्दनो विजयश्चैव जयो मन्मथदुर्मुखौ ।। ५ ।।

हेमलम्बी विलम्बश्च विकारी शार्वरी प्लवः ।
शुभकृच्छोभनः क्रोधी विश्वावसुपराभवौ ।। ६ ।।

प्लवङ्गः कीलकः सौम्यः साधारणो विरोधकृत् ।
परिधावी प्रमाथी च आनन्दो राक्षसोऽनलः ।। ७ ।।

पिङ्गलः कालयुक्तश्च सिद्धार्थो रौद्रदुर्मती ।
दुन्दुभी रुधिरोद्गारी रक्ताक्षः क्रोधनः क्षयः ।। ८ ।।

तिथिनक्षत्रयोगानां सारणीममृ च(?) काम् ।
प्राप्येतामन्त्य(त्य) जं पश्चात्तापं को वा न मुञ्चतु ।। ९ ।।

अहो स्वार्थस्य सिद्धार्थाः प्रारम्भाः सर्वदेहिनाम् ।
अस्माकं तु जनं प्राप्य प्रीतिपीयूषवृष्टये ।। १० ।।

कृतेन ग्रन्थरत्नेन मम मण्डल(य) तो महीम् ।
विद्वद्विपणिषु ब्रूत कति सन्ति परीक्षकाः ।। ११ ।।

यावत् क्षितौ क्षितिपतिः क्षितिरन्तरिक्षं
धत्तेऽन्तरिक्षममृतांशुमयं च लक्ष्म ।
तावत् प्रमोदजननी हृदि सज्जाना-
मेषास्पदं दशबलस्य कृतिः करोतु ।। १२ ।।

भाविर्भावकरः समग्रकरणो भूत्वा तिथीनां गणान्
बिभ्राणः प्रतिराहमर्थिषु बहूधा(द्धा) राश्च योगैर्मुदा।
स्वर्णाद्यस्फुटकोष्टकप्रभृतिभिः प्रस्तारितोऽर्थैर्मया
पञ्चाङ्गस्तिथिरेष सारणि मया मूर्तः प्रसादोऽर्पितः ।। १३ ।।

वहति गणितगर्वं गोलकज्ञः कदाचि-
द्यदि मदनपरोऽसौ मुक्तसौजन्यवर्त्मा ।
जगदुपकृतियोगाजि(ज्जि) त्वरेऽस्मत्प्रबन्धैः(न्धे)
प्रथम(य)तु निजविद्यागर्वितो दूषणानि ।। १४ ।।

श्रीभोजे चतुरर्णवां कलयति प्रौढे तदोष्णा (प्रौढेन दोष्णा) भुवं
विख्यातो भुवि रत्नसंभवलघुर्वैरोचनिर्वालभः ।
गोलग्रन्थविदां वरो दशबलः संस्मृत्य शौद्धोदनिं
बोध(द्ध) व्यामणुबुद्धिभिर्विहितवांस्तथ्यां तिथेः सारणीम् ।। १५ ।।

धन्यैरार्यभटादिभिर्निजगुणैर्डिण्डीरपिण्डोज्ज्वलै-
राब्रह्मादि विसारिभिः प्रतिदिशं विस्तारिताः कीर्तयः ।
स्मृत्वा तच्चरणाम्बुजानि रचितोऽस्माभिः परः(र) प्रार्थितै-
र्ग्रन्थोऽयं तदुपार्जितैः स्वसु(र) कृतैः प्रीतिं भजन्तां प्रजाः ।। १६ ।।

इति महाकारुणिक-बोधिसत्त्व-दशबल-विरचितायां चिन्तामणौ
सारणिकायां संक्रान्ति-संवत्सरानयनं
प्रकरणं समाप्तम् ।। छ ।।

गताब्दैर्गुणितम् एतत् । १ । १५ । ३१ । १७ ।। १७ ।
संक्रान्तिमहानक्षत्रकोष्टकेषु युक्तं स्पष्टाः संक्रान्तयो भवन्ति ।।

Notes

1. D.C. Ganguly, *History of the Paramāra Dynasty* (Dacca, 1933), chap. iv, pp. 88–122, especially 118. Also, H. C. Ray, *Dynastic History of Northern India* (Calcutta 1936), vol. II. The records are unusually full at the period, but hard to date through the flights of poetic fancy. Merutuṅga's fables and the Kalacuri inscriptions leave no room to doubt the fact of the conquest, but it seems obvious that by Bhoja, the latter means Bhoja's successor, though the campaign may have been planned and even started when Bhoja was alive.

2. Colophon—Rajapur Ms.:

    श्री ।। शुभं भवतु ।। स्वस्ति श्री संवत् १५५८ वर्षे आषाढ शुदि २ गुरौ लिखितो[ऽ]यं ज्योतिष-दशबलसमा-मिति ।। शिवमस्तु सर्वजगतः ।। छ ।। छ ।। ।। छ ।। श्रीरस्तु ।। श्री ।। हरिहराय नमः ।। श्री ।। छ ।। छ ।। श्री ।।

    [by a later hand]

    इदं पुस्तकं भूगोलव्व्युपनामक-सदाशिवोपाध्यायात्मज-परमांनदस्य ।।

3. Oxford Ms.:

    स्वस्ति श्री संवत् १५९६ वर्षे कार्त्तिग शुदि ४ चतुथी वारधे ।। रा० वीस्न्याथ० पोथी ।।

42

The Quality of Renunciation in Bhartṛhari's Poetry*

I

Even the comprehensive work of Winternitz (*Geschichte d. Indischen Literatur* III, 137–45) gives us next to no definite information about the person of Bhartṛhari, one of the greatest of all Indian poets and the first to be presented to the West. The reason is simply that no substantial information exists that would seem convincing to any critical mind. The poet could not have been a king, nor the brother of Vikramāditya, whatever the fabulists narrate. That he was not a Buddhist is clear from the ardent and perhaps sincere vedantic verses in praise of Śiva that occur in his *Centuries* (V.85–91 etc.). His identity with the author of the Bhaṭṭikāvya, or with the grammarian, or with the royal disciple of Gorakṣanātha is very doubtful. Some of these negations need no proof, others will be justified later in passing. Only the uniformity of Indian tradition remains to assure us of the existence of a single person who wrote the Nītiśataka (N), the Vairāgyaśataka (V.) and the Śṛṅgāraśataka. Certainly, these works in their present form, whether the work of one or of many authors, succeed in creating a marked impression of a pronounced literary physiognomy.

It is the Bhartṛhari or the pseudo-Bhartṛhari, or even the Bhartṛhari syndicate for the N. and the V. that I mean to analyze here as a literary

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personality without further discussing the vexed question of his existence. The nature of the dissection must, therefore, deal less with the author as a historical personage than with the total mass of literary tradition handed down to us in his name; it will also affect the class of people whose extraordinary powers of appreciation enabled them to preserve a dazzling poetical treasure while completely erasing the author's biography. Well in keeping with the lopsided traditions of this uncritically appreciative class is the (sixth) edition, cited here, of the N. and the V. by M.R. Kale, still so popular as a text in our schools and colleges. Kale's own able Sanskrit commentary, with the slipshod printing of the text itself, and his positively gruesome English translation (which can be used only as a powerful argument against the employment of English as a medium of instruction in India) are all completely characteristic. In what follows N., N'. and V., V'. indicate the verses that Kale takes as authentic and as apocryphal in the two books respectively.

II

It must be understood at the very outset that the poet is worthy of any critic's efforts: that he *is* a great poet. When confronted with the lines written and the sentiments expressed by some of the world's greatest poets, the comparison will not always be in his favour. But let it be clear that at the very least he sustains the comparison, as no second-rate poet would, without fading immediately into obscurity. Many in India have tried to imitate his verses, without even approaching his success. If for nothing else, Bhartṛhari would deserve a place in the front rank of world literature for his consummate handling of so difficult a language as Sanskrit. Variety, ease, facility, clarity, emphasis, and, when necessary, ornate imagery are all at his command without degenerating into the mere rank floridity of later 'poet's poets'. Few could exceed the force of his epigrams, the finality with which the sentiment is rounded out in many of his concluding half-lines. No ordinary versifier could possibly write such polished phrases, the translator's despair, as: 'Life leaks away like water from a cracked jug' (V.39. आयुः परिस्रवति भिन्नघटादिवाम्भः); 'unsipped, at moonrise, the potion of the fair one's tender lips; our youth has passed away fruitless like a light (burning) in an empty house' (V.47: कान्ताकोमलपल्लवाधररसः पीतो न चन्द्रोदये तारुण्यं गतमेव निष्फलमहो शून्यालये दीपवत् ।।); 'how lovely the beloved's face stained with hot, scintillating tears of anger' (V.80: कोपोपाहितबाष्पबिन्दुतरलं रम्यं प्रियाया मुखम्). The senseless and sometimes revolting mannerisms such as the ever-ferocious lion, the rutting elephant (N.29, 30, 38), and the mythical rain-thirsty *cātaka* bird are unhappily too discernible, but not fatal as they would have been to a lesser craftsman. It would be difficult to match the sweetness of (N.51; apocryphal):

रे रे चातक सावधानमनसा मित्र क्षणं श्रूयताम्
　अम्भोदा बहवो हि सन्ति गगने सर्वेऽपि नैतादृशः ।
केचिद्वृष्टिभिरार्द्रयन्ति वसुधां गर्जन्ति केचिद्वृथा
　यं यं पश्यसि तस्य तस्य पुरतो मा ब्रूहि दीनं वचः ।।

'O friend rain-bird, listen carefully for a moment (to my advice). There are many clouds in the sky, but they are not all alike. Some drench the earth with their downpour, and some just thunder in vain; don't beg pitifully from every one that you see'.

In fact, our Bhartṛhari must have been not only a poet by profession, but one fully conscious of the nobility and permanence of his calling. According to him, if a good poet went unrewarded, it was the heavy-witted king and not the poet himself who was at fault (N.15). He speaks in the first person when matching a king's neglect with his own royal scorn (V.52, 53). Poetry confers immortality:

जयन्ति ते सुकृतिनो रससिद्धाः कवीश्वराः ।
नास्ति येषां यशःकाये जरामरणजं भयम् ।।

'Victorious are the great poets, masters of sentiments and emotions, alchemists possessed of the elixir of life; the body of their fame fears neither senility nor death.' (N.24). Here the poet transcends time and space to join a kindred spirit, Dante, in his reliance on fame as a second life (cf. the *seconda-morte*): 'If I should be a timid friend to Truth, I fear to lose my life among those who will call this time antiquity' (*Par.* XVII, 118–20: es' io al vero son timido amico/temo di perder viver tra coloro/ che questo tempo chiameranno antico.).

III

Unfortunately, our hero does not always show the same foursquare stance to the blows of fortune as does Dante ('Io sto ben tetragono ai colpi della fortuna'). Both speak of the misery of enforced voyages in strange places, the bitter taste of a stranger's bread (Tu proverai si come sa di sale/lo pane altrui e come e duro calle/lo scendere e'l salir per l'altrui scale. *Par.* XVII, 58–60). But Dante's exile was due to a firm stand by his civic principles (*Epistole*, XII), a refusal of amnesty with even the slightest tinge of dishonour. Bhartṛhari claims only the motivation of greed, and his chief lament is that there was, after all, no real gain: (V.4).

भ्रान्तं देशमनेकदुर्गविषमं प्राप्तं न किंचित्फलं
त्यक्तवा जातिकुलाभिमानमुचितं सेवा कृता निष्फला ।
भुक्तं मानविवर्जितं परगृहेष्वाशङ्कया काकवत्
तृष्णे जृम्भसि पापकर्मनिरते नाद्यापि संतुष्यसि ।।

‘I wandered through difficult mountainous territory quite fruitlessly, rendered service after jettisoning proper pride of class and family—unrewarded; with a complete abandon of self-respect, I ate in strangers’ houses with the timidity of a crow (picking up scraps); and thou, o sin-loving greed, waxest and art not yet satisfied.’

Our poet claims to have tried other trades: dug for treasure, smelted ores, crossed the ocean, served kings, slept in cemeteries to fulfil magic rites; and he begs greed to leave him because he gained never a penny (V.3). By contrast with the divine restlessness of Dante’s Ulysses (*Inf.* XXVI, 112–20) Bhartṛhari’s efforts as well as his renunciation seem ignoble, earth-bound. No sense of adventure, none of the true explorer’s spirit, the exhilaration of visiting absolutely unknown territory, the joy of treading where no human foot had trod before (non vogliate negar l’esperienza/di retro al sol del mondo senza gente) seems ever to have moved any Indian poet who has survived the passage of time. Rather than with Dante, one is led to compare Bhartṛhari with that thoroughly earthy figure of the Italian Renaissance, Benvenuto Cellini; and here again our poet suffers by the comparison. Cellini too served princes, crossed the Alps, worked with metals—without actually smelting ores, and tried necromancy by night (*Vita*, I, xiii). But whatever he gained or lost, he had no regrets, remained always the whole man, the typical Renaissance figure concentrating all his energies on the task in hand. And he took pleasure in the effort, whether the end was merely the satisfaction of his lust or the production of a masterpiece in the history of art. The world was always the richer for his activities; even his autobiography, with its blunt, forthright, unadorned prose remains a masterpiece of its kind.

Old age brings no peace of mind to our poet nor any real repentance for the misdeeds of youth: only regret for pleasures no longer accessible:

गात्रं संकुचितं गतिर्विगलिता भ्रष्टा च दन्तावलिर्
दृष्टिर्नश्यति वर्धते बधिरता वक्त्रं च लालायते ।
वाक्यं नाद्रियते च बान्धवजनो भार्या न शुश्रषते
हा कष्टं पुरुषस्य जीर्णवयसः पुत्रोऽप्यमित्रायते ।।
वर्ण सितं शिरसि वीक्ष्य शिरोरुहाणां स्थानं जरापरिभवस्य यदेव पुंसाम् ।
आरोपितास्थिशकलं परिहृत्य यान्ति चण्डालकूपमिव दूरतरं तरुण्यः ।।

'The body is contracted, the gait totters, teeth fall out, eyesight is lost, deafness increases, and the mouth slobbers. Relatives no longer respect one's utterance, one's wife neglects her care; alas for the travails of old age when even the son becomes unfriendly (V.74). On seeing white hair on the head, the white flag of a man's surrender to old age, the girls avoid you from afar as they would a well for untouchables marked by its bundle of (bleached) bones (hung on top as a warning)' (V.75). All these sentiments ring painfully true but, as means of inspiring renunciation, rather ignoble. Even that most thoroughgoing of rakes, Casanova, took old age more gracefully than this.

We know of at least one great European poet who felt in his ripe old age the pangs of unrequited love, the mortification of having his advances repulsed by a young maiden. Further, Goethe was also dependent on a petty court and served, in various capacities, the princeling of Weimar. He actually did the many things Bhartṛhari only claims to have done, and had an excellent technical knowledge of many trades—mining and refining ores among them. Goethe had a tremendous literary store and mastery of many verse forms, some of which he was the first to introduce into his own language. From such a person, one might expect something similar to the two *ślokas* cited above, and yet one finds this:

Ueber allen Gipfeln
Ist Ruh,
In allen Wipfeln
Spurest du
Kaum einen Hauch;
Die Vogelein schweigen im
Walde.
Warte nur, balde
Ruhest du auch.

Over all the peaks is peace, in all the tree-tops can'st thou discern hardly the stir of a breath; the little birds fall silent in the woods. But wait, thou too shalt soon have thy rest.

This famous 'Wandrers Nachtlied' conveys its message in the simplest possible language. Night must fall and with it will come rest for the wanderer, whether it be rest from the wandering of a day or the final rest from the long journey of a whole lifetime. Goethe's Faust, blind and near death, still plans with his last remaining spark of life the vast project of draining a fenland (*Faust*, II, Act V, 11559–86) and thinks that the achievement of this service to his people might be the finest moment of his life. But it is to be noted that Faust hates the very idea of renunciation; for him activity is life itself; therefore he typified the restless German of the age of industrial expansion following Goethe, just as Dante's Ulysses fore-shadows all the great trade-seeking explorers of the Renaissance. Renunciation is, after all, a form of negation; and negation is the function of Mephistopheles: Ich bin der Geist, der stets verneint!

But surely the comparison with an European poet of so recent a date is hardly fair to Bhartṛhari, because of the difference in the means of production of their respective environments. So let us first look at the poetry of Sa'di, also an oriental poet, one who lived in a world whose means of production could not have been unrecognizably different from those that prevailed in the time of the Indian. As both addressed essentially the same type of audience, the similarities between them are profound. Sa'di's *Karīmā* is filled with maxims comparable to those of the N., and written with a clarity that dooms it likewise to use as a school text. Some resemblances of phrase might even seem too close to be purely accidental:

(N.70) भवन्ति नम्रास्तरवः फलोद्गमैः = *nehad shak pur mevah sar bar zamin.*

The tree or the branch loaded with fruit becomes humble, bows down to the ground. Perhaps, Sa'di's traditional visit to the court of Delhi might have something to do with this concordance, though this is not the place for tracing the origin of the particular phrase or of other resemblances between the two poems. What must interest us much more is the striking difference between the two poets. With the use of simpler language, the Persian (*Gulistan*) is far more vivid and colourful, more of a human being, because of the range of his sympathies and experience. He did not wander for sordid motives, but for the love of travel and adventure. He knew the routine of courts, of camps, and of caravans. His figures of speech do not disdain even the trader's vocabulary. Bhartṛhari mentions trade and agriculture only once (N.107), and then shows about as much acquaintance with them as he does with aviation when—in the very next line—he mentions the possibility of 'passing birdlike through the broad sky, with the utmost effort.' (आकाशं विपुलं प्रयातु खगवत्कृत्वा प्रयत्नं परम्); besides, the moral of the couplet is that the force of destiny is superior to all human endeavour. As a good Muslim, Sa'di must have believed in destiny, but the tough old man who could chide his soul for not having lost its childishness at the age of forty (*chehal sal 'umre 'azizat guzasht mizaje, to az hale tifli nagasht*) would hardly have given up so easily.

IV

Comparing Bhartṛhari with foreign poets can only lead to defects in the structure of his philosophy. No criticism can be called substantial that does not judge an author on the basis of his own axioms, within the framework of the author's own implicit universe of discourse. For this purpose, the N. is of very little value, since what maxims it does contain are of a lower middle-class outlook on life; and there is no real arrangement or unification, in spite of various efforts by commentators, that could show the full contours of a pragmatic philosophy. As a guide to action the N. is practically useless. The sensuous love-poetry of the Śṛṅgāra would be better, but no one dares take it as the author's highest effort, whatever its beauty of expression. In fact, the point even of those lascivious verses is supposed to be the vanity of mere enjoyment, preparation for a final renunciation of the worldly life. I take the liberty of doubting this common assumption, because I for one find it difficult to say, in many cases, without a conscious effort of memory and on the basis of internal evidence alone, to which of the three *Centuries* [*Śatakas*] a given *śloka* belongs. Let us, therefore, not take any of the three *Centuries* as characteristic, but rather look critically at Bhartṛhari's *summum bonum*: let us see with clear and unprejudiced eyes just what sort of *vairāgya* the poet desires: (V.99)

गङ्गातीरे हिमगिरिशिलाबद्धपद्मासनस्य
  ब्रह्मध्यानाभ्यासनविधिना योगनिद्रां गतस्य ।
किं तैर्भाव्यं मम सुदिवसैर्यत्र ते निर्विशङ्काः
  कण्डूयन्ते जरठहरिणाः स्वाङ्गमङ्गे मदीये ॥

'Fixed in the *padmāsana* seat upon a Himalayan slab on the banks of the Ganges, lost in a yogic trance in the contemplation of the Eternal, shall I ever see those blessed days, when old untimid stags rub their bodies against mine?' Now, clearly, this is not the utterance of a man who has actually tried the joys of yogic contemplation, but of one who feels how happy he might be if he achieved it, in the yet distant future. The composer of these lines still hankers after physical sensation, such as that of the stags rubbing themselves against him: sensation which would be completely inhibited by any really successful trance, yogic or otherwise. The perfect yogī must, as in all Indian tradition, beg his food, wear rags (V.66, V.100); in addition, Bhartṛhari wants the performance to take place at Banaras (कन्थाकञ्चुकिताः प्रविश्य भवनद्वाराणि वाराणसीरथ्यापङ्क्तिषु पाणिपात्रपतितां भिक्षामपेक्षामहे ॥ V.66, also V.88, V'.13). The begging and the rags are apparently an end in itself, an actual part of the final achievement. The Buddhist almsman, on the other hand, was made to beg for entirely different reasons, at least by the founder of the religion. He was to have no attachment to any sacred place; begging was necessary to prevent the accumulation of property and the return of worldly attachments therewith. The Buddhist monk was originally supposed to be a wandering public teacher, one whose function was to educate society in a new social doctrine. Bhartṛhari's is a purely individual effort which could never have been adopted by the whole of society; one which does not involve any social obligations, not even a thought for that unfortunate portion of the population which has no such renunciatory yearnings and is therefore condemned to produce the grub that the yogī must beg and to weave the original cloth from which the yogī's garment of rags must be pieced together.

The real nature of this renunciation becomes clearer when we look at its fruits (V.95, cf. V.'31).

मही रम्या शय्या विपुलमुपधानं भुजलता
वितानं चाकाशं ब्यजनमनुकूलोऽयमनिलः ।
स्फुरद्दीपश्चन्द्रो विरतिवनितासङ्गमुदितः
सुखं शान्तः शेते मुनिरतनुभूतिर्नृप इव ॥

'The earth an attractive bed, his arm an ample pillow, the sky a canopy, the breeze a serviceable fan, the moon for a bright lamp and detachment his mistress, the peaceful ash-besmeared ascetic sleeps as happy as any king'. That is, our ascetic at bed-time fairly wallows in all the pleasures of the worldly life which he claims to have renounced, down to a mistress. Only, instead of the real thing, he has substitutes. I-tsing wrote of a Bhartṛhari who alternated no less than seven times between the pleasures of worldly and monastic life, and Winternitz believes the legend to be derived from the history of our poet. But the couplet just cited seems at best to indicate neither the monastic ideal nor a full share of worldly enjoyment; only the satisfaction of man who utilizes his contemplative life to find palatable substitutes for what he has missed during his pursuit of the *vita activa*. A look at the *Dhammapada* shows how the real thing should have gone:

सुसुख वत जीवाम येसं नो नत्थि किञ्चनम् ।
पीतिभक्खा भविस्साम देवा आभस्सरा यथा ॥ (२००)

'Happily shall we live, those who have nothing at all; on the food of universal love, we shall become like the *ābhassara* gods.' (At best V'16, which is the only verse I can find of Buddhist type, has a very faint resemblance to this.) By contrast, Bhartṛhari's can only be called 'Ersatz-

Entsagung'. One should no longer be surprised on finding that this renunciation is not recommended for all: (V.67.)

अग्रे गीतं सरसकवयः पार्श्वतो दाक्षिणात्याः
पृष्ठे लीलावलयरणितं चामरग्राहिणीनाम् ।
यद्यस्त्येवं कुरु भवरसास्वादने लम्पटत्वं
नो चेच्चेतः प्रविश सहसा निर्विकल्पे समाधौ ।।

'If, before you, you have the songs of accomplished southern poets and behind you the tinkle of ornaments worn by whisk-bearing attendant, maidens, then be a glutton for worldly pleasures; but if you haven't these things, o mind, hasten to enter into undisturbed contemplation'. That is, if you are a king and can make a good thing of it, carry on; otherwise, give up the pleasures of the world which are beyond your reach! At the very least, this should dispose of the legend that Bhartṛhari actually was a king; one feels that he would have taken his own advice and carried on.

V

Starting with praise and recognition of a high literary position, we have kicked Bhartṛhari all the way down the literary ladder. Before closing this note, we have to raise him up again to his proper level, to show that whatever his failures by his own or by any other standards, he does achieve one outstanding success which explains the survival of his poetry and which gives him an indisputable claim to greatness.

I hope that I have dismissed the superstition that the East is naturally more philosophical than the West, and in particular that it is Bhartṛhari's professed philosophy that makes for his greatness. As a matter of fact, for appreciation of pure intellectual beauty, none of his verses will compare with Shelly's Ode; Keats is more of a kindred spirit. Horace shows a far deeper appreciation of the duties and of the lasting pleasures of life, pleasures that do not lead to the renunciation of satiety or of non-attainment. But then Horace knew what it meant to renounce the wide range of careers offered to any well-connected Roman by the early empire, and to achieve a proper renunciation by concentrating, not without effort, upon his poetry; so, he also knew enough to envy the 'tough guts of the peasants'. Virgil planned and began, if he did not live to complete, what would probably have been the most grandiose of the world's literary masterpieces; but the author of the Aeneid was still enough of a rustic to write good poetry in the *Georgics*. In a different medium, Holbein's dance of death (Totentanz) expresses more real philosophy than one can easily distill out of the Centuries. Sometimes, it seems to me that more philosophical content than in a dozen *ślokas* is expressed by Holbein's single diminutive woodcut of a toil-bent peasant behind his plough, helped on by compassionate Death towards a shining city on the sunset horizon. Certainly, Giotto's campanile and its reliefs convey more to me of the worthiness of human life in its various possible fields of endeavour than does the whole of the N.

Nevertheless, I repeat, Bhartṛhari is a great poet for what he does succeed in portraying. He is unmistakably the Indian intellectual of his period, limited by caste and tradition in fields of activity and therefore limited in his real grip on life. The only alternatives open to any members of his class seem to have been the attainment of patronage at court, or retirement to the life of an almsman. The inner conflict, the contradiction latent in the very position of this class, could not have been made clearer than by the poet's verses. This also explains the 'popularity' of the verses themselves in the face of far superior and more philosophically inclined doctrine available in all Indian literary forms. That is, precisely this class was, and still is, interested in the preservation of Bhartṛhari's poetry.

The varying aspects of such class-life naturally render any orderly arrangement of the subject matter superfluous, and had hitherto made it impossible to do anything in the way of stripping the quasi-philosophic renunciatory guise from the writings themselves. Had the limited aspirations, the general futility of that class-life been made explicit and unmistakable, a more complete negation presented beyond the 'renunciation', the poetry would have become intolerable to the class itself, and would not have survived. The poetical physiognomy of Bhartṛhari is actually the physiognomy of the Indian intelligentsia of an age that has not yet passed away.

We might illustrate this in detail by inspecting Bhartṛhari's attitude towards women. They have a frank lustful attraction for him which he reveals with gusto. A young nymph crushed by the act of love (N.44 सुरतमृदिता बालवनिता), a beautiful woman's ripe breasts and thighs (V.46: रामापीनपयोधरोरुयुगलं), devastating glances (V.48: आलोलायतलोचना युवतयः N.85: कान्ताकटाक्षविशिखाः generate attraction, admiration, desire, which he can never conceal even in these two *Centuries*. The third, of course, is devoted almost exclusively to the topic with an appetite that makes Ovid seem pale and colourless in comparison. Entrancing maidens (N.104: सविभ्रमा युवतयः) are among the fine gifts of good fortune! There is no overspiced Hellenistic aberration here, and certainly no Freudian repression of the libido; not even Archilochus could have been more frank and unashamed as to his weaknesses. One can only pity the miserable pedagogue who, even in the strongly anaesthetic atmosphere of a modern Indian classroom, has the completely unenviable task of paraphrasing in an unerotic and decent manner, to a mixed class of adolescent boys and girls, such juicy bits as: V'.27: तन्वङ्ग्या विपुले नितम्बफलके न क्रीडितं लीलया।

By degrees, excess and satiety creep in, women become snares and temptations (V.65, V'.9, 19, 20, 34, 38–44) to be treated with hydriotaphic avoidance (V'.19: नार्यः श्मशानघटिक इव वर्जनीयाः ॥). The logical destiny of this attitude is to lead to absolute disgust for what once seemed charming—and man may again become irresistible (V.17): स्रवन्मूत्रक्लिन्नं करिवरशिरःस्पर्धि जघनम् etc., which should be compared for repulsive effect with Juvenal's description of the female after finishing her gladiatorial exercises. But there is always the notable distinction that the Roman wants a cure for the social evils of his time, whereas the Indian only looks to his own individual salvation. There seems in Bhartṛhari to be not even the consciousness of the fact that woman is herself a human being, has her share of this world's sufferings, and might also feel the need for renunciation, for freedom from her own peculiar sorrows and problems.

Yet, the picture so far is not only incomplete, it is actually false to the poet's own sentiments. One stanza breaks with quite incredible force through the general impression hitherto produced to give the unbiased reader a profound if brief glimpse of the truth usually missed by professional critics and literateures, true but not very worthy members of Bhartṛhari's own class. (V.22)

दीना दीनमुखैः सदैव शिशुकैराकृष्टजीर्णाम्बरा
    क्रोशद्भिः क्षुधितैर्निरन्नविधुरा दृश्या न चेद्गेहिनी ।
याञ्चाभङ्गभयेन गद्गदगलत्-त्रुटयद्विलीनाक्षरं
    को देहीति वदेत्स्वदग्धजठरस्यार्थे मनस्वी पुमान् ॥

'If he did not visualize his wife as sad-faced, unfed, miserable, with her worn raiment constantly tugged at by pitiful, hungry, crying children, what man of self-respect would ever beg for the sake of his own accursed belly, in quavering, broken words that die in his very throat for fear of refusal?' (cf. also V'.12).

This betrays the real fear of the poet's life, the grim spectre of starvation that confronts him and his family unless he can beg his way into favour. No member of the modern unpropertied, technically incompetent, intelligentsia in this country can read the lines without a shudder; those who talk of the peculiar situation of the *Bhadralok* in Bengal might consider whether the same dread does not stalk them too. Surely, this is not the obvious attitude for a man who shuttled between the court and the monastery, who alternately enjoyed and repented of his enjoyment of life. The solitary effort shows a far deeper feeling for the family tie than would be proven by a whole new Century on the virtues of a householder's life. Even in bourgeois-capitalist countries, the dread of unemployment is always the most potent factor in the maintenance of an outworn productive system; with what greater force must this motive have acted when the capitalist forms of production had not cast their shadow upon India, and no real employment existed for our intelligentsia apart from the favour of a wealthy patron or resort to the almsbowl?

The promiscuity of the *Centuries* is not so much a characteristic of this country as of the class and of certain forms of the artistic temperament; it exists to as great an extent in the West except that no one there ever has had the courage to express it so frankly. For the rest, Bhartṛhari did know something about women of pleasure, as the mentions *varāṅganā* (N.47), *panyāṅganā* (V.66). And he did not live in a society that professed belief in the ideal of monogamy, whatever may have been its general practice. So, his single lapse into sincere consideration for wife and children seems all the more significant, by sheer contrast.

Whether or not it might seem to us a proper subject for poetry or social philosophy, the appreciation of a little wealth and the extreme dread of poverty are quite convincing in our poet's words. 'All those identical limbs, the same actions, that undamaged intellect and the very speech: yet how strange, that without the warmth of wealth, the same man becomes instantaneously someone else' (N.40):

तानिन्द्रियाणि सकलानि तदेव कर्म
    सा बुद्धिरप्रतिहता वचनं तदेव ।
अर्थोष्मणा विरहितः पुरुषः स एव
    त्वन्यः क्षणेन भवतीति विचित्रमेतत् ।।

(Also, N.39, 41, 44, 49). This is even more strikingly put in an epigram which the editor relegates to the apocrypha: An exhausted penniless being rushes to the cemetery and begs a corpse to rise and take off his load of poverty for an instant, in order that he might enjoy forever its death-born happiness; but the corpse, knowing that death was far, far better than poverty, is silent! (V'18):

उत्तिष्ठ क्षणमेकमुद्वह गुरुं दारिद्र्यभारं सखे
    श्रान्तस्तावदहं चिरं मरणजं सेवे त्वदीयं सुखम् ।

इत्युक्तो धनवर्जितेन सहसा गत्वा श्मशाने शवो
    दारिद्र्यान्मरणं वरं वरमिति ज्ञात्वेव तूष्णीं स्थितः ॥

From this economic oppression, escape was possible only by the sudden accession of wealth, or renunciation of all such desire. For the first, there were no regular social paths; no success stories of the 'From Log Cabin to White House' type, nothing to interest Horatio Alger. Only luck can bring a windfall; hence the general fatalistic bent, at its strongest in N. 90–108. On the other hand, renunciation too requires a strength of character not usually developed by our penurious intellectual. Either the gain of wealth or successful renunciation are impossible for the entire class as such without a complete social revolution; even the individual achieving either thereby manages to declass himself. So, we have a more practical way of escape, the purely literary expression of sensual enjoyment (which in actual practice would be impossible except for one of considerable means); or, its continuation, an equally literary expression of the joys of renunciation. Bhartṛhari's verse does not express the supposed 'dual personality of the Indian', forever oscillating between two extreme poles: renunciation of the senses and their voluptuous gratification. It is on the contrary, and *par excellence*, literature of escape. Bhartṛhari's philosophical beauty is just a facade erected by the members of his class, to mask their real use of his poetry.

VI

Bhartṛhari, then, is the poet of his class; a class that had not fulfilled its function, and a poet who, try as he might, could not but lay bare the class yearnings and weaknesses. This at once explains his success and his failure. But he is not a poet of the people. The Indian poets who made a real and lasting place for themselves in the hearts of the people came from the people themselves, and not from this narrow helpless stratum shut off from the masses by birth, training, occupation or the lack of it, language and culture. Those poets spoke the languages of the people, addressed themselves to the people and not to the court. Every child knows their names, and every peasant their songs. Even our intellectuals, as scholiasts and editors, try to suck a little of their vital blood. Kabir, Tukarama, Tulasidasa: what portion of the country does not possess its own poet of the sort? But only one Bhartṛhari sufficed, because the intelligentsia could and in fact needs must take the trouble to learn his language; and he had put their case in words that could not be matched.

This class was perhaps the most convenient tool of the ruling power, whether indigenous or foreign, in the enslavement of the Indian people. To a considerable extent, it still maintains this anomalous position.

One of my critics holds that all Sanskrit literature is impersonal; that neither Bhartṛhari nor any other Indian poet of unknown biography can be judged by what he claims to have done, in his own verses. This would be relevant if my critique were directed towards the private life, and not the writings alone, of Bhartṛhari. After all 'impersonality' is a characteristic of all literature, not specially of Indian poetry. The great author need only project himself into an experience, not necessarily have had the experience itself; as witness so many touching passages relating the thoughts and behaviour of a character on the point of death. But the mechanism of this projection, the images and phrases which the writer utilizes, must unconsciously reflect the structure of the society in which he functions, must inevitably bear the stamp of the class to which he belongs.

That Bhartṛhari must have been a Brahmin seems reasonably certain. His most convincing figures of speech are Brahmanical (N.42, 48). The king's wrath burns even those who serve him, as the fire might its officiating priest (N.57: होतारमपि जुह्वानं स्पृष्टो दहति पावकः ।।). When begging, the pious high-caste people whose doorways are blackened with the smoke of many sacrificial fires are to be approached by preference (V.24: न्यायगर्भद्विजहुतहुतभुग्धूम्रोपकण्ठम् ।) What is the point of reading scriptures (V.72: किं वेदैः स्मृतिभिः पुराणपठनैः शास्त्रैर्महाविस्तरैः) when realizing the inner joy is the proper 'activity' for man? If there be wealth, all the virtues and caste itself might go to the nether world (N.39: जातिर्यातु रसातलम्). By contrast with these, the rare mention of the Kṣatriya's profession seems ridiculous, such as 'splitting elephants' heads with the sword' (V.47: खड्गाग्रैः करिकुम्भपीठदलनैर्नाकं न नीतं यशः ।).

But he must have been a Brahmin of a comparatively late period. Certainly, he could not have belonged to that earliest of all stages when the Brahmins were yet to develop as an integral part of the social system; when they were still fugitives in the woods, living spiritually on the exaggerated memories of a culture destroyed by fighting invaders (later to become the Kṣatriya caste) and subsisting upon roots, wild fruit, cattle. This period, however, left its mark on the language in the form of two bits of wish-thinking: the cow and the vine that fulfil all desire: *kāmadhenu* and *kalpalatā*; these are reflected in the advice our poet gives to the king as to the best means of exploiting the earth (N.46). Even the later ideal of retiring to a sylvan life after having enjoyed that of a householder is absent in Bhartṛhari, whose renunciation hardly rises above complete aesthetic paralysis (V.97, V'.8, 29: N.81). He can only have belonged to the period after the Mauryan 'universal monarchy', after the brahmins had saturated all petty royal courts as ministers and advisers, had saturated the lower social strata as priests, had finished their chief contribution to religious and productive organization by outmoding the age of great monasteries, and were at the beginning of their last great phase, a literary expansion of secular type. This can hardly have been much before the fourth century AD, and might not have taken place simultaneously over the whole country. Any attempt to assign a very early date for Bhartṛhari would have to cope with the reference to the ten incarnations of Viṣṇu (N.100: विष्णुर्येन दशावतारगहने क्षिप्तो महासंकटे ।), and to the hermaphrodite Śiva (V. 18: प्रियतमादेहार्धहारी हरः). The authenticity of these two stanzas can be challenged, as also of the Śṛṅgāra verse दिश वनहरिणीभ्यो, which extols the pale golden complexion of Śaka maidens. But the word *sāmanta*, originally 'neighbour', can only mean 'feudal baron' in V. 42. This usage, though current in the sixth century, would be difficult to establish before the Gupta period. Therefore, the late third century AD would be the earliest reasonable period for the Bhartṛhari who saw this beginning of Indian feudalism, but no empire of any size.

At no period had the brahmin caste, whether priests or not, a position fully comparable with that of the Roman clergy. It lacked the organization, the popular recruitment that gave a possibility of close contact with the masses; it could never have performed the function of sheltering the germination of new productive forms concentrated in the free ecclesiastical cities, which meant the end of feudalism in Europe. At best, the caste was like the mistletoe: a beautiful parasite regarded with superstitious reverence by the multitude, but whose unlimited proliferation was at least a symptom if not the cause of decay.

The greatness of an author does not lie in mere handling of words. Indeed, the finest craftsmanship of such manipulation is impossible without the expression of a new class basis. This does not mean that every writer who seeks enduring fame must express only the glory of the dictatorship of the proletariat: it is doubtful if Shakespeare could have grasped the meaning of the word (proletariat) itself except perhaps as a mass of Calibans. But in Shakespeare's day there were other classes, the new trading gentry for example, that had begun to force their way to the front and had yet to become, in their turn, obstacles to human progress.

One must remember that, during the course of its struggle against the old, every new class tends to assimilate and identify itself with the entire oppressed section of the human race—to take its own victory as the total desideratum of the progress of civilization. In our own day and country, we have seen the worst aspect of this phenomenon only too often. How many talk of India and its needs when they are really making a case for a little greater share of the spoils for themselves and their minute group?

This brings us, in passing, to the problem of literature for a classless society, after a socialist revolution. How is it that the new literature in those countries where such revolutions have been completed does not yet show the same relative power in the way of new authors and impressive new literary forms that may be seen with the earlier social changes? In all previous cases, the new class had formed in the womb of the old, and had begun to express its new ideals, needs, and aspirations in literary from precisely because political expression was not feasible at the earliest stage. This is manifestly impossible in a true socialist revolution where the common working-class people, the vast and often illiterate majority, must necessarily assume power. The transition has never been smooth, according to modern history, but on the contrary the result of the grimmest possible social and economic disasters. The urgent problem before such a post-revolutionary society is to overtake and to surpass the anti-socialist but technically more advanced countries. At the same time, there is a costly struggle with this hostile environment, which constantly attempts to crush the dangerous innovation, to strangle the new social forms. Nothing in all extant literature was composed in or for a society without division into antagonistic classes—not even the utopias that visualized such societies. The writers who continue to function in the new society bear the stamp of the old. Even the 'progressive' writers cannot help the smell of decay which they carry from the rotting away of the class that supplied their models, to which they generally belonged, and towards which they were oriented in their formative years. This inner contradiction, which leads so often to the dismal 'boy-loves-tractor' school of literature, is not to be cured by party directives, nor by fiery resolutions at writers' conferences. The cure can only come through the fully developed literary taste of the entire new society, which means universal literacy, and full availability of the classical writing in that particular language. The development of new art forms and the changed relative position of literature has also to be considered. The cinema, television, radio should have, at least on occasion, produced scripts that could be additions to literature. But the deadly influence of the newspaper with its advertising meant to sell any goods for private profit, its processing of news to sell shoddy ideas for class profit, and the vile sensation-mongering that sells the paper while diverting attention from serious cracks in the foundations of the social structure—all these have completely changed the function of the written word even in bourgeoise society. The new society will, in some way, have to link its aesthetic problems directly to those of production. New social art forms must develop in a radically different way, just as dance, music, poetry, drama, painting, and sculpture developed out of primitive, pre-class fertility rites, initiation ceremonies, and sympathetic magic. It is difficult to imagine Plato's 'music and gymnastics' in a modern factory, only because we have not yet begun to develop the units and forms of real social production that will dominate the future, and therefore not even visualized the innate harmony and the unforced natural rhythm that must accompany such production.

The great poet in a class society must not only express the position and aspirations of an important class, but must also transcend the class barriers, whether explicitly or implicitly. He must lay bare some portion of the structure of society, pointing the way to its future negation. (Where Bhartṛhari fails to do this effectively his greatness is fictitious, loaned to him by the class itself). *This is most easily done in the period of class emergence*, and explains why, in so many great literatures, the greatest names come at the beginning and not at the end of their historical development; why the Alexandrians could only gloss the Homeric epics, not create them. It also explains the power of such writing to attract readers centuries after the society that was heralded arose, flourished, and passed away. Often, the newly developing class takes so much time to assume its rightful place that the new poet has little chance of contemporary material success, and passes his life in obscurity. We know nothing of Homer's biography; the cultured Elizabethan set cared little for Shakespeare's. Not having been a writer of epics, narratives, or dramas for the amusement of a court might, therefore, explain the veil cast over Bhartṛhari's life and the dominant note of frustration that sounds so distinctly throughout the V. (V. 2–5, 7–9, 11, 12, 16, 23, 46–8, etc.)

बोद्धारो मत्सरग्रस्ताः प्रभवः स्मयदूषिताः ।
अबोधोपहताश्चन्ये जीर्णमङ्गे सुभाषितम् ॥

'The learned are consumed by jealousy, the lords (of the earth) are tainted with pride; the rest are doomed by ignorance, and so wilt my epigrams within me' (V. 2). For due appreciation, the poet necessarily had to await the rise of a Sanskrit-knowing and yet numerous class. That Bhartṛhari lived at the period of the emergence of this peculiarly unemployed Indian intelligentsia would thus seem intrinsically probable, but one can hardly insist upon it, seeing that the author's very existence is in doubt!

But there can be no doubt as to his transcendent powers. In closing the V., he bids farewell to the very elements that made and reared him, and from whom he gained the pure knowledge that enables him to merge into the Eternal: (V. 101).

मातर्मेदिनि तात मारुत सखे तेजः सुबन्धो जल
भ्रातर्व्योम निबद्ध एष भवतामन्त्यः प्रणामाञ्जलिः ।
युष्मत्संगवशोपजातसुकृतोद्रेकस्फुरन्निर्मल-
ज्ञानापास्तसमस्तमोहमहिमा लीये परे ब्रह्मणि ॥

Through the mouth of the chained and tortured Prometheus, Aeschylus calls upon the elements to bear witness to a great injustice perpetrated by the highest gods:

O holy earth, O mother mine,
O sky that biddest speed along
The vault the common light divine
Be witness to my wrong.

(Morshead's translation)

The Indian asks for far less. Having forgotten his petty lusts, trifling fears, vain longings, he speaks to his relations the elements, with the loving and noble humility of a St. Francis of Assisi, a gentle word in that final moment of the ultimate sublimation of personality.

43

Introducing Vidyākara's *Subhāṣitaratnakoṣa**

I

Time and Place

The broadest possible termini for Vidyākara are AD 1055 (the last year of Bhoja's reign) and AD 1205, when *S* was written. But the most probable time for version *N* can hardly be later than the reign of Rāmapāla, say AD 1100,[1] and hence not later than about 1130 for *TK*. The paleographic evidence is not accurate enough to be of use here, except to show compatibility with this estimate. In the absence of substantial direct evidence, I shall be compelled to argue from internal considerations alone, adding up small independent probabilities to arrive at conclusions based upon maximum likelihood.

While the name Bhoja is found in the Rigveda, the Arthaśāstra, and Ptolemy's *Almagest* as a tribal designation, with two kings named Bhoja in the Pratihāra dynasty and several minor Bhojas in Kaśmīr, the Bhojadeva or Bhojyadeva of *V* can only be the famous Bhoja Paramāra of Dhārā. The preceding section points out that Bhoja must have become legendary by the time of *V*. This can happen within a man's lifetime in India, but the model of Bāṇa's *Harṣacarita* would show that though during the king's reign his feats might be exaggerated, the romantic life written even by a court poet would not be pure fable. Then we have also to allow for the time lag necessary for the fabliaux to reach *V*'s territory. This means at least AD 1075. Thomas' often quoted statement (*T*. intr.,

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*Selected sections from *The Subhāṣitaratnakoṣa compiled by Vidyākara*, edited by D.D. Kosambi and V.V. Gokhale, with an Introduction by D.D. Kosambi (Harvard Oriental Series, volume forty-two), (Harvard University Press, Cambridge, Massachusetts, 1957).

p. 16) that none of the poets 'are known to be later than about AD 1000' is overenthusiastic. Bhoja's stanzas occur even in his *T* fragment, while the royal poet could not have become famous by AD 1000, if indeed he had written anything before that date.

In what follows, it is essential to mark carefully the kind of sources from which Vidyākara made his selection. The great classical writers are taken on their merit, their epigrams being represented according to their quotable output. This applies to Rājaśekhara, Bhavabhūti, Bāṇa, Murāri. The stanzas peculiar to *V* as compared with the other Sanskrit anthologies of early date show a certain preference for Buddhists, but a particular type of Buddhist. That is, *V* cannot be labelled a Buddhist anthology offhand, as was done by Haraprasad Sastri. A stanza of the great Aśvaghoṣa opens the anthology, yet neither this nor any other in the whole of *V* is to be found in the extant works of the great Buddhist poet, nor is any other stanza in *V* ascribed to Aśvaghoṣa. Śāntidevācārya and his *Bodhicaryāvatāra* are unrepresented. Where is Kumāratāṭa, Mātṛceṭa, the pseudo-Nāgārjunas, or the real one, not to speak of the Southern Buddhists? In contrast with these great names, the Buddhists selected have either a local fame, or write *subhāṣitas* in the later classical style. Thus we have several almost unknown poets in the opening *vrajyās*; the Kaśmīrians Śivasvāmin, Dhīranāga, the author of the *Tāpasa-vatsarāja* figure in later sections. Taking all this into consideration, the omission of the prolific Kṣemendra's name and stanzas is striking. Though most of Kṣemendra's phenomenal output is too dreary for any *subhāṣita* collection, he has many fine benedictory and tag verses in his *Avadānakalpalatā*, which qualify doubly as good Buddhist poetry. His lesser works on poetics also contain original stanzas that would grace any anthology, though all we find in *V* is an occasional stanza not to be traced in any extant work of Kṣemendra, but doubtfully ascribed to that author by some other anthology. The distance from Kaśmīr would not cause much delay, because Magadha was still a great centre of Buddhist pilgrimage and study, and hence of exchange of literary works. At the end of the twelfth century, Śākyaśrībhadra of Kaśmīr was prominent in Magadha and Bengal. Kṣemendra's most important works had been published by AD 1075. Another notable omission is that of Bilhaṇa,[2] several of whose stanzas are found in *S*, even cited by the author's name (confused in some manuscripts with Śilhaṇa). The *Vikramāṅkadevacarita* is dated fairly well earlier, the *Caurapañcāśikā* not much later; all three contain enough material for a few stanzas at least to have found their way into *V*—if Vidyākara knew of the poet. The nearest he gets to Bilhaṇa seems to be the poet Gaṅgādhara (of stanza 1406), who may have been the court poet of

Karṇa, king of Ḍāhala, whom Bilhaṇa claimed to have vanquished (*Vikramāṅkadevacarita* 17.95). Bilhaṇa's poetry was known through a considerable part of India, and certainly in *V* territory (which we shall locate a bit later). That Vidyākara should not be attracted by Kṛṣṇamiśra's aggressively anti-Buddhist *Prabodhacandrodaya* even if he had read it is perfectly comprehensible; that he does not draw upon Kṣemendra and Bilhaṇa or the much nearer śrī-Harṣa and Umāpatidhara argues his ignorance of these poets, hence his having preceded them or at best followed them within too narrow a margin of time.

The only reason for considering a date later than AD 1100 is the single doubtful citation after stanza 923 (found in *K* only) of the name Dhoyīka. Dhoyī or Dhoyīka was a court poet of Lakṣmaṇasena of Bengal (accession AD 1178). Inasmuch as a colleague, Umāpatidhara, seems to have been court poet also of Lakṣmaṇasena's father and grandfather, we need not bring Vidyākara down to 1178, but 1150 would seem a possible terminus. Personally, I doubt the validity of the ascription. The same stanza is attributed to Yogeśvara by Śrīdharadāsa (*S.* 1. 84.5). As *S* is definitely an anthology of Lakṣmaṇasena's court, with many references to Dhoyī, including two stanzas to be found in the *Pavanadūta*, Śrīdharadāsa would have been better qualified to recognize an elder colleague's stanzas than Vidyākara. The citation seems to have been a slip on the part of some later scribe.

It is vital to locate the place of Vidyākara's activity, without which no satisfactory dating is possible. In the days before publishing houses, advertisements, and printing, Sanskrit poetry of the type here considered did not originate or flourish without royal patronage, though it travelled slowly from court to court before diffusion. Therefore the particular court is important in determining the anthologist's period and explaining his choice of sources. The locality must have been between Kanouj and Bengal. The most prominent of the poets cited is Rājaśekhara so that the first glance may lead one, as it did me, to associate our text with the Gurjara-Pratihāra court—which had vanished by AD 1018 while the Gāhaḍavālas rose to power only in 1098. Rājaśekhara as the last to produce Sanskrit poetry in the grand manner in a period when a poet could travel all over the country with honour and profit (late ninth and early tenth century), imposes himself upon every anthology by the volume, quality, and dispersion of his output. That his dramas lack originality and stage value makes the stanzas embedded therein all the more suitable for the anthologist. The Paramāra court may be removed from the possibilities, since the name even of a standard court poet like Padmagupta-Parimala (of the *Navasāhasāṅkacarita*) does not appear, though it seems to have reached

S (3.45. 1). Dhanañjaya and Dhanapāla are missing too. Bhoja himself and Muñja find place here by reason of the phenomenal activity of the former, and the time elapsed. It is the group of restricted citations, the long list of minor poets not found elsewhere with comparable frequency, which must determine the particular locality.

The conditions are now quite obvious. The royal patrons must have been Buddhist with simultaneous veneration of Śiva and Viṣṇu or else the order and contents of the first six *vrajyās* are inexplicable. For this very reason, the Sena court that fathered *S* must be excluded. The Buddha was not higher than an *avatāra* of Viṣṇu to the Senas. Yet *V* cannot be located far from northwest Bengal, if one is to account for descriptions of snow and frost, festivals like *Kundamahotsava*, and manuscript survival only in Nepal and Tibet, along with the dominant influence upon *S*. All this fits just one line of kings, namely the Pālas, sometimes called 'of Bengal' from their title Gauḍeśvara, but actually rulers of Bihār and parts of west and north Bengal for over four centuries.

That *V* represents the poetic tradition of Pāla court and abbey can be proved even apart from the foregoing general considerations. Abhinanda in *V* is undoubtedly the author of the *Rāmacarita (RA)*, not of the *Kādambarīkathāsāra*; two stanzas from *RA* are actually found in *V* cited by Abhinanda's name. His father Śatānanda is also well represented. Now Abhinanda certainly (Śatānanda presumably) lived under ninth-century Pāla patronage. The Jitāri mentioned so reverently as author of our stanza 28 is unquestionably the great *ācārya*, who appears so prominently in Tibetan also as Jetāri and Jaitāri (*d*gra-la*s*-*r*gyal-va, *Tār*, p. 230, note 4). The stanza, as will be seen, is actually from the dedication of one of his works. We know (*Tār*, p. 232) that he was a royal *paṇḍita* of Vikramaśīla monastery under King Mahā(ī)pāla. Jñānaśrīmitra appears in the Pāla period, while our Dharmakīrti, whose stanzas are among the most sparkling and graceful in the collection, seems to have been confused at times with the earlier Buddhist logician. Vasukalpa, who refers to Rājaśekhara and may be assigned to the tenth century, eulogizes a King Kāmboja again and again. Normally, this would place him in Afghanistan, but we fortunately know that this too refers to the Pālas, and we may see herein the solution of a riddle in Pāla history. The Dinajpur pillar inscription[3] refers to a King Kāmboja, a copper-plate (*EI*. 22, p. 152; *EI*. 24, p. 43; *HBD*. pp. 190–1) describes well-known Pāla kings as ornaments of the Kāmboja line, while there is no evidence whatsoever of conquest or even battle between the two lines of kings. We may point here to some lesser authors of the collection, Dharmapāla, Rājyapāla, Ratipāla, Vijayapāla, Harṣapāladeva, as also Nayapāla in *P*; any one of them might pass without notice, but the aggregate is significant. Once proved, the association with the Pāla tradition may be utilized actively to place hitherto unknown poets who are cited much more frequently in *V* than in other distant but early anthologies such as the *Sbh* in Kaśmīr and *Smk* in the south.

Detailed references and arguments will be found under the individual authors listed at the end of the introduction. But some of the historical information thus obtained seems particularly important for the history both of the Pāla kingdom and Sanskrit literature. Dharmadāsa and his *Vidagdhamukhamaṇḍana* must now be placed well before 1130, hence a century earlier than hitherto. Vallaṇa and Manovinoda must have been Pāla court poets. Ārya Kṣemīśvara can be assigned to the court of Mahīpāla I of the Pāla dynasty, not the Pratihāra king, though the question has aroused a bitter controversy in the absence of any reliable evidence. Unless we needlessly postulate several Abhinandas, the eulogy of Śrī-Candra-deva in stanza 1384 (see also 1402, 1500) seems to date that king (who was also a Buddhist and ruled during Pāla times to the east of Pāla territory proper) at least fifty years earlier than the earliest date hitherto proposed. More could have been deduced from these *praśasti* stanzas but for the intensely formal and lyric quality of the verses—quite in keeping with the whole classical Sanskrit tradition, so that the poet generally fails to mention whom he is eulogizing, let alone for what feat.

As the case of Jitāri shows, the great monastic foundation is at least as important as the court for locating *V*. The two are intimately connected. Vajrāsana (= Buddha-Gayā) had older traditions but it came to the days of its greatest glory under the Pālas, as did the new Pāla foundations of Vikramaśīla, Uddaṇḍapuri, and Jagaddala. These *vihāras* gave the title *paṇḍita* (of the institution in question) by royal command (*Tār.* p. 243, 247, 250, etc.). To judge from survivals in Tibet, the official title *paṇḍita* must have involved long study leading to a formal examination in the Buddhist scriptures by the leading scholars of the particular *vihāra*; the successful candidate would, presumably, be granted a royal stipend along with the title, or Tāranātha's references have no meaning. The great importance of this is seen at once for *V*, where we have just three writers with the affix *paṇḍita*, namely Buddhākaragupta (also referred to in the honorific plural like Jitāri), Khipāka (1457), and Jñānasrī (1697). Buddhākaragupta seems to have been then alive and he had not Jitāri's universal fame, but the indications are clear that in his own *vihāra* he did enjoy a superior reputation. *S* uses the prefix *paṇḍita* only to distinguish between King Harṣa and the twelfth-century poet, who is there usually labeled *kavi-paṇḍita-śrīharṣa*.

It remains to locate the *vihāra* on internal evidence, in the absence of any further indications. The local lights Buddhākaragupta and Bhīmārjunasoma are not found in Tāranātha's lists, which cover the leading figures of the western monasteries in Pāla territory. By 1100, the Pāla empire was on the verge of collapse, the last powerful king, Rāmapāla, having recovered the finest part of his own territory from the Kaivarta chief Bhīma only by help of over a dozen powerful chieftains who had independent status. Tāranātha (p. 252) is clear that no Pāla after Rāmapāla could be called a king, which means that none after him did much, if anything, for the Buddhist monasteries. Rāmapāla's capital was in Varendrī[4] parts of the Rājshāhī, Bogra, Malda, and Dinajpur districts of Bengal), as was the Jagaddala[5] *vihāra* which enjoyed special royal partonage[6] under Rāmapāla. This would account for the provenance of *V* manuscripts, for Paṇḍita Śākyaśrī and his disciple Vibhūticandra fled to Jagaddala when the Muslims sacked the western monasteries (*Tār*. p. 255) and thence to Tibet in AD 1203. The manuscripts that went with them to Sāskya, from which the Ngor collection was derived, would come primarily from Jagaddala. Rāmapāla's son Rājyapāla barely survived him, though wielding the royal power in his father's last years (*RC*. 4.3, 6, 7; *Tār*, pp. 252–2 Yakṣapāla). After one or two further intermediaries, another son Madanapāla ascended the powerless throne (*circa* AD 1144–61). The poem of Sandhyākaranandin (*RC*) published during Madanapāla's reign shows degenerate taste, the absolute dead end of senseless formalism. That Pāla court poetry had reached the level (as did the later *Rāghavapāṇḍavīya*) of an acrostic or crossword puzzle does not indicate general decline in northern and eastern India, but merely corresponds to the shrinkage of Pāla territory, wealth, power. The Gāhaḍavālas who patronized the poet śrī Harṣa (*circa* AD 1160) had encroached from the west, having taken Patna and Monghyr, headquarters of the earlier Pālas. Vijayasena's dedication (before AD 1158) of a temple to Śiva at Deopārā in Rājshāhī district proves simultaneously that the Senas had already attracted or developed so good a poet as Umāpatidhara, and that they had occupied at least a part of Varendrī, the very core of Rāmapāla's dominions. These Senas rose within a generation of Rāmapāla from the position of feudatories or officials to independent sovereignty, while Gāhaḍavāla supremacy to the west is from AD 1090 with Candradeva who ruled from Banāras to Kanouj. The Pāla decline seems to have been complete by AD 1150; to what extent it affected the monasteries and our anthologist cannot be determined here.

We may note that the laudatory stanzas in Pāla copperplates do not occur in the corresponding panegyric sections of *V*, though their style is quite familiar after reading *V*, and several have unquestioned merit. This contrasts with the case of *S*, which quotes four stanzas of Umāpatidhara under his name which are found in the Deopara *praśasti* (*EI*. 1. pp. 305–15; 7 = *S*. 3. 49. 4; 23 = *S*. 3. 17. 5; 24 = *S*. 3. 5. 5; 30 = *S*. 3. 17. 4) signed by that poet, as well as a stanza found in the Madhainagar plate (2 = *S*. 1. 72. 4) of Lakṣmaṇasena. It is quite fitting that the official panegyric by a court poet should be cited in a court anthology; the absence of such citations would strengthen the argument that Vidyākara was connected with the Pāla court only through a monastery. The copperplates were generally written in advance by the court poet, with standard verses; the portion where the beneficiary of the land grant and his donation were specified being left blank, to be filled in at the time of the grant.

Till more substantial evidence is discovered, the most plausible conclusion that may be reached is that Vidyākara first compiled his anthology about AD 1100, at the Jagaddala Vihāra, the place where the last great Pāla was crowned. If the final stanza is to be taken with the double meaning generally to be expected in *subhāṣitas*, he may even have been a *paṇḍita* of the vihāra, as were with greater probability Buddhākaragupta and the Bhīmārjunasoma who is called *paṇḍita-śrī* in the final colophon. Buddhākaragupta might have been promoted by royal patent between the two versions *N* and *KT* (say about AD 1130), since only *KT* show the affix *paṇḍita-*, and the honorific plural termination. Bhīmārjunasoma seems to have been close to Vidyākara, from the marginal additions of *N* discussed earlier; one may interpret them as friendly suggestions for the next edition. Certainly, Avalokiteśvara—who comes next only to the Buddha in the anthology—was the tutelary deity of Jagaddala (*HBD*. p. 418). A Vidyākara who collaborated with a Tibetan Lochava in the translation of *Rgyud*. xliii. 84, might even have been our otherwise unknown scholar.

II

The Nature of the Anthology and Its Poets

It is clear from the preceding section that the details which one needs for the usual type of literary history are lacking here, as in all Sanskrit literature. Compared to the solid documentation possible, say, for Dante, we have not enough to furnish a single paragraph of trustworthy biography for Kālidāsa, Bhavabhūti, or Bhartṛhari. The normal alternatives would be to winnow an occasional grain of doubtful fact from the scattered chaff of obscure, ambiguous, semi-legendary references; or to shrug off historical analysis with the standard remark that all Sanskrit literature is anonymous. It seems to me that high Sanskrit has not the popular anonymity of a fluid work like the *Kalevala*, nor the guild anonymity of

Homeric poetry. Biographical details for Indian poet and king were obliterated simply because the word was too powerful for reality, from always plowing under mere content. Still, a larger view of the choice, arrangement, and relative emphasis of subject matter and the technique of handling selected topics in this anthology tell the intelligent reader a great deal about the development of taste and literary ability during the period. If causes can be assigned, we have a literary history after all.

Of the fifty sections into which *V* is divided, the first six are devoted to heavenly characters, including deities of the somewhat illogical Buddhist pantheon. The seventh is an intermediate section on the sun, a lesser deity. We then have the seasons, a group of section which corresponds to the medieval European *Book of Hours*. The difference is that the Indian work implies a classical education, with better taste and memory for poetry, whereas the *Stundenbuch* needed only eyesight for the possessor, but far better-developed miniature painting to manufacture. The illumined palm leaves of this period contain purely religious pictures, no artist having been employed in the secular productions that would have told us so much about life in the eleventh century while giving a precise meaning to many an obscure Sanskrit term. This is due at least in part to the caste-guild of artists trained in a rigid mannered tradition. The anthology gets down to its main business with *vrajyā 14* on Eros. The real nucleus of the collection is this and eleven succeeding rubrics which continue various aspects of love in practice. This is love in the direct Indian tradition, sensuous erotic experience that left visible marks (of teeth and nails) upon both participants. All the varied facets are represented, many with a surprising delicacy and charm that do not survive translation into a language with less involved syntax or more puritanical background. Intense longing for the absent beloved, pining described in exaggeration by the go-between *dūtī*—who might herself substitute at times for the heroine whose desire she was supposed to convey—the expression of more vigorous delight in gratified passion, the wiles of the woman not content with her husband's love, the beauty of the girl blooming to womanhood, are all delineated. Thirty years ago, conventions in English would have made it difficult to represent most of this verse, though it is quite normal Sanskrit, as in good taste, but the dismal byways explored by writers of such different merit as James Joyce and J.M. Cain should now make it more simple. It should be kept in mind that neither language nor literature were for the vulgar herd. Sanskrit poetry here manages to surpass Boccaccio's tales in verve and gusto, though limited by a single stanza as the unit, as against the Italian's complete narrative. There is a certain healthiness, however, in this sexuality. The bestialities of a Tiberius Caesar as reported by Suetonius are missing; we hear little of prostitution, and nothing of homosexuality or other abnormalities that now seem proper literary material in the West.

The remaining sections are of a miscellaneous nature. In spite of a *vrajyā* on renunciation, this anthology has not settled down to the *dharma, artha, kāma, mokṣa* (ethics, economics, erotics, salvation) which was standardized by Bhartṛhari's *nīti, śṛṅgāra, vairāgya. Nīti*, in particular, is poorly represented, while *śṛṅgāra* pervades almost everything. Sections *32, 41*, and *46* give some outrageous court flattery which should have yielded a great deal of information but for the pyrrhic victory of form over content, the final absorption in the play upon words which began and ended the ultimate period of Sanskrit literature. The last section in praise of poets is of much the same nature, though a little more in the way of chronological succession can be deduced from it. Of these sections, about the most attractive is *35*, the *jātivrajyā*. This gives a series of epigrams where the limitations of the isolated stanza are compensated by delimiting the subject; lyric style and lyric content match perfectly to preserve for us the beauty of a trifling momentary incident. A dog chases a cat (1163), quail pick up seed at the edge of a muddy field (1181), sparrows scratch (1162) in plowed furrows; a bull startles the peasant woman (1176), butting his way out of the rain into the hut; the old dog wags an abject tail in passing (1158) but displays his fine white teeth in a snarl; 1171 is a competent description of a cockfight; an aging presbyopic scholar struggles with a book (1179) before the days of lenses; the tattered brahmin acolyte of 1170 plods homeward with the day's meagre pickings to split firewood, at eve. These are quite exceptional topics for Sanskrit poetry, which only too often shows the unhappy crash resulting from an attempt at far higher fight. The *vrajyā* begins startlingly enough with an epigram (1148) wherein the unknown but unmistakably Bengali poet brags of the large number of pond fish, highly spiced and fried in oil, that he has gulped down without even troubling to wash up first. Stanza 1175 is unique in depicting merciless oppression of villages whose consequent desolation is emphasized by the cooing of doves in the orchard. Lacunae in the text of 1190 interrupt a characterization of some dreadful cult-spot in the dense jungle where human sacrifice was still practised. Vidyākara's own delight in poetry of this genre is shown by expansion from fourteen to thirty-five stanzas. Much as we should have liked to read many more of the sort, it is difficult to imagine where he could have found them. Next in charm are the verses on country life, mostly by Yogeśvara. Here we see the preparation of mustard oil (318), peasant women singing (1178, 1182, 314) as they have through the centuries to the rhythm of pounding grain, farm workers dropping tools to chase hares started during harvest (300), the shepherd (282) who relaxes on the cool, clean silt of a river bank.

An essential characteristic is that the poet is a spectator of these activities, never a participant even in imagination. No clay was moulded into vivid life by his fingers, no wall grew tier upon tightly bonded tier in his hands. Not for him the joy of driving a straight furrow with fresh, well-fed beasts at the plow, nor the pleasant sensation of trudging home at eve with muscles tired after a good day's work or a long day's hunt. The men who did all these things belonged to a meaner class; Sanskrit meant less to them than Greek to the soldiers of Marcus Aurelius. The *Dhammapada* admonished its readers in simple terms of physical activity: or rising from a wrestler's fall to strive again, of breasting the flood, climbing a high mountain (of virtue) to gaze upon the tiny creatures of the valley, of curbing with firm rein the runaway chariot of one's passions. The writer—Buddhist or not—of this period fifteen centuries later knew only one type of exertion outside the lover's bed, namely travelling. Here indeed he would have to walk barefoot in hot summer dust that could eat up his very toenails (204), plod on cold winter mornings through snow and frost (307–9), or carry his streaming umbrella like a caged prisoner (242) under the monsoon downpour. For sustenance, he would have to wheedle a handful of chaff from the overweening farmer (305); for shelter in his exhaustion, he might be denied a corner by some raging housewife (1316) and huddle up for the night in a cramped refuge furnished by the rude forest shrine of a village goddess (1305). Sometimes, he would realize that the place where he begged room and board for overnight was even more poverty-stricken (1314, 1328) than he.

Indeed, poverty—of his particular class—seems to be the only reality with which the poet of the classical period came to grips. There was so little he could do to get out of its clutches, with neither capital for trade nor guild training (caste again!) for craft. If he were a practising priest like the great majority of those who knew Sanskrit, he needn't bother with poetry unless a stronger ambition and taste for court life drove him. Otherwise, there was no regular market for his fantastic wares, now that the ancient language had developed very far away from that of the common people who might still give something to a storyteller, singer, bard, or mendicant but to whom the pretty conceits of a finely turned *subhāṣita* meant nothing. The overcrowding of the priesthood and taste for greater comfort without the loss of social status that went with access to the Vedas raised new problems for solution within a narrow social framework. For example, the famished householder says to his wife (1306), be patient till the rains, then the pumpkins we can grow without labour by our hovel will feed us as well as any king. Even so, the hopefully borrowed 'golden water' might leak through the cracked pot (1315) on the way home, leaving the dismayed housewife to face a still hungrier future. Nor does starvation force upon the penurious intellectual the slightest idea of going out to earn something by his labour; the society of the day had conditioned his mentality and that of his fellows, to the extent of severely limiting the scope of his permissible activities. There is no land; a single ox (1317) may be the only source of income for a family which is terrified and helpless when the decrepit beast is too exhausted to get up. The entire family lives in just one room (1310) which combines all the functions of kitchen and dining room, living room, nursery, bedroom, and lying-in chamber too. If the children are fed somehow on any one day (1311), the mother wishes that night would never pass to bring on fresh worry about food on the morrow. Often the hungry but shy youngsters would cast avid half-glances at the diners (1320) from some more fortunate doorway. However, this is poverty of the intelligentsia; not of the proletarian, the *pāmara* who has nothing to live by except the hard labour of his scabby body; with him the poet feels no kinship. The court and the monastery, with some sort of guaranteed living, were essential for classical Sanskrit poetry, hence inevitably set the norms. Our poets had long passed the stage when they would burst into song for the sheer joy of being alive.

'The true stimulus of human life, tomorrow's joy' is not based upon a standard of living; it can derive only from a creative attitude to reality, consciousness of effort within reach of new success. The most fruitful endeavour must necessarily be collective, *with* the rest of society, not at its expense. The poet's failure was that of the diminutive class which he served. Great dreams are rare when the power has been lost to make dreams come true in reality. For all its charm, the *jātivrajyā* cannot aspire to the splendidly creative Faustian moment of which a superb poet could say, 'Verweile doch, du bist so schön.'

III

The Basis of Feudal Sanskrit Literature

There are authors in this anthology of whose vivid experience no real trace remains. Harṣa, Rājyapāla, Muñja, and Bhoja were kings as well as poets. Each one of them had to lead an army in several battles. In 1413, the hero's arm draws so powerful a bow that the poet warns the very gods to look to their laurels. Far greater effect is achieved by Arrian's direct statement that nothing could withstand the Indian archer's shot, which pierced shield and breastplate alike. The word *nāsīra* (1406) means he who charges ahead of the battle line; as such it is standard praise for kings in inscriptions and copper-plates. But we look in vain for Sanskrit military literature to match passages in Caesar's commentaries, Polybius, or Thucydides; only Bāṇa's account of the army striking camp is impressive enough to make us wish that he had said something more about warfare. Who described the massed thunder of a cavalry charge, armoured elephants breaking through compact ranks of infantry, the desperate tumult of a last stand? Yet there were people in every generation who had witnessed or participated in all of these, had been stirred by a parade of victory, thrilled by the narrative of a forlorn hope courageously fought, some lost cause defended with unyielding bravery. Grettir the Strong, Bussy d'Amboise, Hereward the Wake, are foreign literary examples of one man against many, fighting impossible odds merely because it was not in them to surrender. Thus we have Abhimanyu of the Mahābhārata. Karṇa in the bitter speech to the mother who bore and abandoned him, shows unflinching defiance of clear doom, preference for honour to an elder brother's rights in kingdom and queen. These two found only the moralizing cant and doggerel of the epic to celebrate their fortitude. Over-exaggerated panegyrics in *V* do not compensate for the absence of such heroism, but then the anthologist had no choice in the matter. Since the experience was constant, and there existed war lords who could write excellent Sanskrit poetry, we have to explain why the poetry of prowess was not written.[7]

The average Sanskrit poet wrote for the patrician, hence mainly within the limits of their common experience. This means precisely sex and religion. We have to deal here with *class* literature. When drawing conclusions about life in ancient India from any such work as this, it must always be remembered that that life was not shared by most Indians of the poet's or of any other time; in essence, not even by the poet himself. The Sanskrit stanza implies mind and memory not otherwise preoccupied, ample leisure to work out its double and triple meanings, mythological allusions, complicated figures of speech—apart from the long training needed to write even the simplest bit of Sanskrit. The people generally depicted here combine infinite leisure with a full measure of wealth. The women decorated themselves with pearl necklaces (385) and jewels, tinkling girdles, silken clothes of a revealing nature; long hours were spent in applying cosmetics in curious intricate patterns, drawing pictures of or composing messages to the lover, enjoying perfumes and the betel leaf (614). We do not hear of much furniture in the houses, but the ideal[8] of luxury is obviously in painful contrast to the actual, familiar poverty depicted above. Even the high gods live like patricians. Husband and wife gamble for heavy stakes (77, 98), or for love-for-feits (764, 605–6). The living skeleton Bhṛṅgin wonders how Śiva will manage to keep all his incompatibly mixed entourage without conflict (97); he and his bloated companion Kūṣmāṇḍa hope for preferential treatment over each other (99) as retainers at the great wedding. Pārvatī is equipped on the eve of her marriage (102) by the wise woman (*gotra-jaratī*) of the great patriarchal family household, who gives her all sorts of advice and charms against the grim bridegroom's deadly company. Pārvatī's mother notes in a pleased whisper (80) the signs a night of love has left on her daughter and son-in-law. General dancing breaks out when the attendants are told that a son has been born (71) to the goddess. Life in such a household implies possession of large estates, in contrast to the indigent poet's single room. All the formalities are observed, though with a certain traditional simplicity. The principal servant sleeps in the same room as his lord and lady (132), turning away from embarrassing scenes. The elder brother is addressed respectfully (85) as *ārya*. The younger couples rarely obtain sufficient privacy (571, 573) and are abashed to find their love-talk of the night repeated in daytime before the elders (616, 621–2, 631) by great house-parrots or other talking birds.

It is such life towards which the poet, a talking house-bird of higher rank, is oriented, which he depicts in the plays from which most *subhāṣitas* are taken, and to which he might aspire by royal favour; naturally, we find its pleasantest aspects most highly developed in his poetry. Woman may be a household animal to him, but she is also the one luxury of the rich that he can savour at first hand with the highly developed technique of the *kāmasūtra*. Every portion of the anthology is permeated by the theme of sex. Even in dealing with the gods, it is their night life which is most often treated (125 and others), generally with the same complete lack of reticence as in *vrajyās 19–20*. What may surprise the reader is that monastic scholars also enjoyed, and perhaps wrote, such erotic poetry without the least sense of transgression or incongruity, without deviating from a puritanical doctrine and the ascetic life in any other way. The great Jain *ācārya* Hemacandra quotes and comments upon many of our stanzas with the zest of any other theorist of Sanskrit poetry, finding nothing in the act unworthy of his high position in a celibate religious life of unquestioned purity. Nor is he alone in this. These people were connected with the court as preceptors to kings, but there is no question of an Indian Abélard, let alone the jovial monks of Boccaccio or the Roman clergy at the time of Alexander VI. It follows that the type of poetry had become as much the fashion as the Sanskrit language among the ruling classes and their educated dependents. The conventions developed by professional poets suited kings like Harṣa and Bhoja, so were taken over without thought of new departure by them as well as their pontiffs and abbots. In flavour, there is little to choose between the Buddhist Dharmakīrti and his Śaiva or Vaiṣṇava colleagues.

Any martial spirit among the warriors was satisfied by their own poetry in their own language. The sagas of Rajasthan, the extensive *rāso* literature which is still read and sung in somewhat altered form, had already developed in the eleventh century. Although Hāla's stanzas were still cultivated, Prakrit had become even more of a dead language than Sanskrit. The new poetry of the common people can hardly have been considered literature at all, but must rather have aroused amusement and that tinge of good-natured contempt for the *hālika* which we find even in the *Sattasaī*. We still have the *Vīsaladeva-rāso*, but the same king (or a successor) under the Sanskritized name of Vigraharāja chose to have Sanskrit dramas[9] rather than the old Rajasthani saga carved in his inscriptions. A feeble Sanskrit poem *Pṛthvī-rāja-vijaya* (of which fragments are available) commemorated the great Pṛthvī-rāja Cauhāna-Cāhamāna; his particular *rāso*, the last of the series, is ruined by heavy inflation on the Purāṇa-Mahābhārata model. Presumably, Harṣa and Bhoja figured in this sort of poetry too, which has vanished without a trace. We have no way of knowing whether they belonged to that select group of military leaders like Maximus of Britain, the Connétable Bourbon, and General Dovator whose soldiers composed songs in their honour without professional aid.[10]

In regretting such losses and the influence of Sanskrit in bringing them about, it is necessary to reach a just evaluation of the classical language and of the culture that accompanied it. Latin differs greatly, in that its medieval and classical forms do not coincide. The Aryan conquest during the Vedic period, which imposed the language upon less well-armed aborigines, was a series of tribal victories not comparable to the financially calculated advance of Rome over the Mediterranean world. While developing from the Vedic to the classical, the language died for the greater part of the population, as is shown by the use of Pāli for the Buddha's sermons and Aśoka's inscriptions, and Prakrit for the women and common people in all classical plays. The brahmin class is primarily responsible for keeping both ritual and language alive while regarding itself as superior to the rest of the people. This could not have succeeded without a working alliance with the ruling class, for which again there is ample testimony. Harṣa was not five generations away from a sun-worshipping tribal ancestor (*DHI*. p. 76). His royal prestige, gained by force of arms, was tremendously enhanced by the mastery of Sanskrit, which assimilated him to the previous upper classes and so ultimately to the rest of his subjects. Much the same statement is true of the earlier Rāṣṭrakūṭas, the first Pālas, and Bhoja's ancestors of the Paramāra clan; this method of legitimatization of a rule may be carried back to the Guptas and perhaps to Rudradāman,[11] having been employed by all dynasties in medieval pre-Muslim India, as we see from their inscriptions. Sanskrit education was only one of the luxuries that served the princes who succeeded to a kingdom pacified by their predecessors; *śṛṅgāra* permeated both language and settled court life. At least as men of culture, the medieval Indian kings are decidedly superior to most of the emperors described in the *Historia Augusta* who developed only vice with power. When tribes as a whole fought their way to the top, say in the times of Attila, Clovis, or Theodoric, we still fail to discover parallel European cultural attainments. Certainly the learned men about Charlemagne will not compare with those at the court of Harṣa or Bhoja. Whereas the organized Christian church had started with the tradition of irreconcilable antagonism to pagan learning and classical literary ideals, the brahmin priesthood preserved its unity by developing the Sanskrit language and literature. Inevitably, Sanskrit with its claim to immemorial antiquity became a sort of court language for records, land grants, communication between top officials, and intercourse between regions that had developed their own local languages. Simultaneously, it became the mark of a class, as did Persian later, and English today in India; the common people who did not know this superior language and had not the superior caste-marks (later replaced by imported fashions in constume) seemed to belong to a lesser breed. However, the later 'class languages' did not supersede Sanskrit, not having struck deep enough root in the cultural soil of India; there is no Indian contribution worth the mention to Persian or to English literature, which had their centres of gravity far away. Latin since the time of the Renaissance, French when it became fashionable among the German and Russian aristocrats, served a similar purpose. But the picture obtained of any Indian's character or thought through Sanskrit alone (even of Rāmānuja's philosophy) is as misleading and unrealistic as the Mughal-Rajput paintings of Pṛthvī-rāja, dressed in Mughal style, and sporting luxuriant moustaches on a progressively fatter face with fatter body—as unlike as possible to the romantic image of a dashing lover, headstrong fighter, pious but heroic worshipper of the gods found in Rajasthani literary sources.[12]

It is not surprising that this circumscribed literature produced only one

Kālidāsa (and that one only with the early Gupta empire), tending more towards the empty bombast of a Rājaśekhara, to *subhāṣitas* packed with intricate subtleties which suffocate the sense. The real potentialities lay in the languages of the people, but our Minnesingers found no steady patrons. Only in religious literature does a poet like Kabīra survive to prove how great was the loss. The unfortunate part is that we also lost our chroniclers and troubadours.

IV

The Twilight of the Gods

It is easy to show that the question of religion, of the particular sectarian worship professed by the anthologist and his public, had a quite fundamental part in the vicissitudes of the work. The first six *vrajyās* of *V* are not fully comprehensible today except to a specially trained antiquarian. The reaction from Vidyākara's Buddhism is already manifested in the transmission of *T*, from which precisely the Śaiva folios have been removed, presumably for separate reading (or with less probability because of rising Vaiṣṇavism). The reaction is at its strongest in *P*, which becomes almost unreadable by dedicating the whole first *ullāsa* of twenty-seven folios to Śiva and his company, with another forty folios—in all, well over a third of the surviving work—in honour of other deities, including the sacred rivers. Śrīdharadāsa does much the same thing in *S*, but less extensively,[13] inclining much more to the Bengali type of Vaiṣṇavism which takes Buddha and Balarāma as incarnations of Viṣṇu, while devoting many 'waves' outside the *avatāra* sections to Kṛṣṇa, who seems to be regarded as a decidedly more powerful representation of Viṣṇu. Why was so much space for religious verse necessary when a benedictory stanza or two would have served better, repelling fewer readers in later days?

It is not easy to see any conflict between sects at first glance. All the gods are equally honoured, albeit the non-Buddhist ones (in *S*, *P*, as well as *V*) lack the divine afflatus, being comically human in their failings, and in their problems, in spite of the supernumerary arms and heads grown by Hindus as the equivalent of Madana (Eros) because of his companion bees;[14] at the same time, Madana is Māra, the demon of temptation defeated by the Buddha, like Ahriman and Satanas by founders of other religions. The whole list of observances is inextricably mixed. Even when fully conscious of the differences, people found no difficulty in simultaneous worship of Buddha and Mahādeva or any other god in spite of the fact that the Buddha is not a god, and Buddhism is not an idolatrous religion but a code of ethics. The Kaśmīrians Kṣemendra and Śivasvāmin are cases in point. The numerous statues of the Buddha found in this period prove that the original position had been lost, the Teacher becoming only a super-god, as indeed he appears even in the later Pāli Canon. Harṣa maintained three foundations: for the Buddha, Mahādeva, and the sun,[15] the last being his clan-god, the second undoubtedly the god of his family for some time; his line bore the title *paramāditya*, his predecessors were also *parama-māheśvara*.[16] The Pāla kings gave plentifully to Brahmins, and to Brahmin temples, as also to Buddhist *vihāras*. Harṣa's *Nāgā-nanda* is dedicated to Gaurī although it is a play with a Buddhist theme in which the royal author is himself supposed to have acted. The Buddhist astronomer Daśabala, a Kathiawar contemporary of Bhoja and perhaps of Vidyākara, similarly begins by dedicating his work to Śaradā without forgetting the Buddha.[17] Tantric works arise from very ancient fertility cults, practised clandestinely at all times, and with symbolism reverting to the Indus Valley culture; they became the inner fashion in Śaiva, Buddhist, and even some Vaiṣṇava circles of this period. Not only Tantrism but the worship of Gaṇeśa (connected with the Buddha perhaps through the dream of Māyā and the white elephant, as well as through the word *gaṇa* = *saṃgha*) is to be found in many documents of the Tanjur.

Yet there was conflict below the surface. Harṣa was attacked by a Pāśupata assassin[18] in the passage connecting the place of worship to that of assembly, precisely at the ceremonies where he showed equal honour to three divinities. His enemy Śaśāṅka derived considerable success as an anti-Buddhist crusader, cutting down the sacred tree[19] under which the Buddha had reached enlightenment. At Nālandā, we find images of minor Buddhist deities which conquer 'Hindu' gods, as for example Aparājitā, of which the careful mutilation sparing the downtrodden Gaṇeśa proves only the continuation of the conflict after destruction of the Buddhist university. The Senas did not specially patronize Buddhist monasteries, their fortification of Uddaṇḍapuri[20] resulting only in its complete destruction by the Muslims. The quarrel does not end here, but continues between Śiva and Viṣṇu, for King Lakṣmaṇasena is the first of his line[21] to worship the latter god. There is clearly more than theology involved. We know the reason at the final stage, which spread for centuries all over Brahminized India as the Smārta-Vaiṣṇava controversy. The basis lay in the terms of possession and exploitation of the land, the followers of Śiva or Devī remaining for a long time the great landlords, while the small producer or landowner worshipped Viṣṇu; theological conflict developed only because economic conflict was a reality. Within a couple of centuries we have Vaiṣṇava works,[22] which put the follower of Śiva on the same level with a beast or untouchable, though there existed great Śiva temples at places like Banaras which were crowded with worshippers from all parts of the country. We can follow this back at least one stage, to show that the Buddhists had been similarly dispossessed by the Pāśupatas. The Vaiṣṇavas gained support by claiming the Buddha (as they had earlier claimed the Boar and other cults) as an incarnation of Viṣṇu. In places, the tension was minimized or reconciled by a hybrid deity Hari-Hara, which shows Viṣṇu as the senior partner. But the quarrel was not to be denied. The technique is notable, in that the *avatāras* can appeal to a far wider section than Śiva, his Mother-goddess consort, various children and following. As long as there was enough for all, the ruling class holding together, it was possible, even necessary (as in Rome) to worship all the deities that there were, for cohesion and safety. When one section or a newly developing subclass tried for supremacy over the rest, sectarianism became violent. The pioneering period had ended, settlements had reached a fairly tight packing, and the next stage was internal dissension. Vidyākara wrote just before the struggle came to a head, before the upper classes began to choose sides; his very tolerance for all gods stopped the wider spread of his anthology. He had no way of knowing that the time was out of joint; his two successors tried desperately to set it right by the wrong method.

As a matter of historical interest, we may note two incomplete solutions of the conflict. The indigenous one is exemplified by Jayadeva, an author trained in music as well as the Brahmin's craft, but who wandered far to gain real insight into the minds of his people. His life and art were one; he had romantically wooed and wedded a beautiful wife; they continued to travel, he singing verses of his own while she danced. This was not on the same level as the ordinary country jongleur, for in their performance they exemplified the sublime love of Rādhā and Kṛṣṇa, a theme Jayadeva developed in his *Gītagovinda* for Lakṣmaṇasena's court. But in his country songs, he used a more popular idiom; two ancient Hindi musical poems stand in his name in the Sikh *Ādi Grantha*.[23] A festival is still annually celebrated at Jayadeva's birthplace Kenduli, not in memory of his *Gītagovinda* but because he introduced a new and joyous life, with faith in a personal god who is close to rich and poor. With Caitanya and his followers, a way was found through *bhakti*, music, ecstasy, and dance to make the rich surrender part at least of their prerogatives, for we are told that whole villages would dance to the next settlement in joy.[24] People dance on that scale only when some new form of life has developed that bears a vision of hope; one may see this for himself in the new China.

The other development came from the Muslims. These people combined trade and religion with war, thus acquiring a flexibility exceeding that of Brahminism. In the Gāhaḍavāla kingdom, they were local settlers who paid their special tax quietly, the *Turuṣkadaṇḍa*.[25] Occasionally came a wave of invasion which was sooner or later turned back, though each time with a greater deposit of Muslim settlement. In the east and south however, there had been considerable penetration by traders. We know from contemporary grants as far apart as Goa and Veraval that these merchants built mosques under sanction of Hindu rulers,[26] which implies that their numbers increased by peaceful local conversion. The religious democracy of Islam must have been far more attractive under the tensions of ingrowing 'Hinduism'. The advance of Muhammad bin Bakhtyar Khalji with a mere handful of cavalry was really the military link-up between these Muslim settlements in Bihar and West Bengal, which took to arms with alacrity when the sword gave far more gold and converts than did trade.[27] The environment was of greater importance than actual military intervention from outside, which had been resisted on a larger scale. In spite of highly mobile cavalry, the Muslims had no military advantage in the first attacks on Bihar and Bengal except that which came from the surprise, and internal decay of the opposition's political and social system.[28] The same Muhammad Bakhtyar attacking tribal areas in the northeast with 10,000 picked horsemen barely managed to return with all but a hundred of his army wiped out. Neither the external nor the internal solution worked in the long run any more than did Tantric witchcraft and magic ritual.[29] Replacing one land-owning class by another does not solve the problem. The Koran gave more opportunities than the Bhagavad-gītā, for the convert had new professions open to him such as trade, yet the permanent outlet provided by Islam to anyone who wanted to escape from the confines of the caste system was used by few, after the beginning. Though even slave converts rose to the highest positions in the empire of Delhi, such opportunities were for a few individuals; the lower classes as a whole remained where they were, to be still more tightly squeezed. This is why the indigenous gods continued, why the looting and desecration of Somanātha did not end the cult nor the *praśasti*. The theological expression of a deep crisis was inevitable in a world where underlying causes were not evident, where religion played so fundamental a role in social life. It is fairly clear that even without Islam, there would have been some sort of iconoclasm and violent religious upheaval in India; but it would have been as ineffective as Christianity in the later Roman empire. Mass conversions to Islam of the poorer peasants in East Bengal have been explained as owing to their originally having been Buddhists oppressed by Śaiva landlords,[30] but no one claims that they found much lasting economic betterment thereby as a class.

V

The Social Functions of Literature

The previous section has had to follow an inverse reasoning, for lack of direct evidence. Had we records in India comparable to those of Europe, it would have been possible to write the normal scholarly and soporific essay, causally pointing out the fundamental crisis that was reflected in the literature of the epoch. Inasmuch as the episodes and details are lacking, it might be as well to specify the basic theory.

Poetry, along with music, dancing, painting, and sculpture, is older than civilization, much older than writing. Sanskrit poetry of all periods was accompanied by the preliterate emphasis on sound and memory, without being itself primitive. The ritual-magic functions of primitive art forms by no means disappear with the rise of urban civilization and the art of writing. Thus, for example, we have the glyptic of ancient Mesopotamia and Mohenjo-Daro which used cultic taboos to seal merchandise. Sanskrit never lost its ritualistic basis or religious stamp.

The analysis must therefore derive from the class divisions of every society in which literature was cultivated. The professional writer before the machine age was a member of the leisure class, which in turn includes and is appended (as is the priesthood) to the ruling class. Hence literature may be viewed in two aspects. The first would be as a closed preserve of the class in power, private literature not accessible to the common herd. This is typical of all Sanskrit, so that its patronage may be called (following Thorstein Veblen) a method of conspicuous consumption. At its broadest, this type of writing marks the unity of the upper classes, as the Sanskrit language unmistakably did till AD 1200. There is secondly the broader literature which serves all society; this too becomes saturated with the ideas of the ruling class, taking on the appearance of a tool for domination. But the development and technique have to be different here. The theme or approach must be traditionally familiar to the people at large, accepted by society as a whole, thus suitable for embroidery with special class glorification. That society has progressed by the development of successive classes to positions of dominance implies that the progressive writer is oriented towards the needs of some rising class; his greatness derives from the inevitable tendency of the class to look upon the interests of all humanity as its own. It is a corollary that the great writers come far oftener at the beginning of their period than at any later stage;

they are the ones whose appeal outlasts their times and society. This is why we do not dismiss great writing because it is class literature. When the class in question has gained power, there follows a neat inversion whereby its own special interests are proclaimed to be those of all humanity. The writers set themselves in a far narrower mould.

The *subhāṣita* literature that concerns us here could not reach the people, so its class interests remain unmistakable. The hold upon society was indirect, through the religion and ritual preserved Sanskrit. A class structure is maintained ultimately by force, but strong religious belief minimizes the need for violence in its maintenance. Belief in common gods and the inevitability of caste was one of the bonds that formed a coherent society of many producers subject to the few. Associated with the nobility in sharing the surplus as well as ensuring its expropriation were the priests in temples and monasteries, no less than the armed feudal retainers. The very absence of the heroic lay implies stronger religious bonds. Religious conventions would have been patently hollow and ineffective had they not been as sincerely adopted by the ruling class as their amatory conventions. Poet and priest were brothers in fact and in deed; sex and religion went together.

It follows also that new types of literature cannot be expected without the rise of new classes. The English reformation under Henry VIII shows the unmistakable beginning of such a new class, along with that of new literature. Even for the Elizabethan age, only the authors that look forward with the new gentry attain permanence, as, for example, dramatists like Marlowe and Shakespeare who did not scorn to display their wares to the London theatre audiences, or the keen-witted John Donne; the authors who looked backwards to the court and its entourage wrote with no less skill, effort, mastery of words, but the *Faerie Queene* and Lyly's *Euphues* seem comparatively insipid. In India, the new literature had to await the passage of centuries, till the great social novels in Bengal with Bankim Chandra Chatterji, matched by those of Rabindranath Tagore whose incomparable poetry speaks of completely new social aspirations. The social drama in Marāṭhī hardly antedates the First World War. I am not qualified to speak in detail of contemporary Indian literature, but it will be admitted that these vigorous manifestations had been preceded by centuries of dreary classical imitation, even in the vernaculars. To those who could write, the ten-headed Rāvaṇa had remained more real than their living human neighbours, the woes of the Pāṇḍavas indistinguishable from their own. Foreign conquest explains nothing, for where is the corresponding influence of Persian, though that had become a court language all over the country, to be cultivated by learned Hindus. The

Fisāna Ajāyab and *Bāgh-o-Bahār* might as well have been written at the time of the Arabian Nights. The difference is that the British introduced a fundamentally new, advanced mode of life, the bourgeois, as against Muslim feudalism which had meant a comparatively trifling readjustment of the way in which people lived. With Ghalib come new problems and new writing. The verse of Akbar Allahabadi shows what life nationalism could infuse; Mohammed Iqbal's great days gave us an Urdu poem that became a national song, his words *Hindostān hamārā hai* stirring every person who heard them—except the British. Yet this is unmistakably class literature. Munshi Premchand has many admirers, but no worthy successor, though the modern Urdu and Hindi short story begins with him. Iqbal's later years showed higher Persianization, greater introspective detachment from the problems of the country, and a British knighthood! Competent writers increase, but the framework is now set, foreign models cheap and easy to imitate, profoundly original writing unnecessary as well as uneconomical, 'progressive' writing no less imitative, though more dangerous and liable to be suppressed by police action.

For that matter, it is not possible to view modern literary development in the West with equanimity or pleasure. The tradition may be roughly classified as that of love and prowess, just as the Sanskrit mode was love and religion. For historical reasons, violence left an indelible mark on the writing, and was turned to good use by the ruling classes. The Anglo-Saxon thanes who heard *Beowulf* recited killed no monsters; no medieval knight quested after the grail. Yet it is clear that both classes derived some justification for their use of force against their fellow men from the reflected glory of their supposed ancestors. The right way to destroy any monsters that might exist is the mass action of African Masai, killing lions with assegai and shield. It was the modern bourgeois policeman who rescued damsels from distress without distinction between noble and serf. The detective story follows the knightly formula with fundamentally sound instinct, but hardly seems literature even when written by a master of plot and prose like G.K. Chesterton. The emphasis is increasingly on pure sadistic violence after a brief period of neo-Freudian literary sexual license. The conclusion seems to me inescapable that the class which mass-produces such writing is moving towards some crisis even more violent than that whose shadow remains in theological Sanskrit. This cannot be for lack of range, for Jules Verne and H.G. Wells showed what brave new worlds opened out to the imagination based upon modern technology and science. Yet science fiction has never risen above these prisoners.

There is plenty of rough obscenity in Rabelais, but we know what dangerous opposition he faced. His work still ranks high in world literature as the general *śṛṅgāra* epigram does not. If the Sanskrit poet had been conscious of his failings, which were those of his society, there would at least have been powerful satire, of which no example is to be seen except perhaps ridiculous exaggeration. Pulci's *Morgante*, Folengo's *Maccaronicon* lead to the residual masterpiece, *Don Quixote*. The disillusionment of the First World War gave us a corresponding literary figure for modern times, J. Hasek's *Good Soldier Schweik*. It cannot be the traditional past that inhibited Sanskrit epigrams of this type. Deor laments the sudden disfavour of his lord, a theme quite familiar to the Sanskrit poet. The Anglo-Saxon minstrel, in rougher language and heavier rhythm, consoles himself with the tradition of distress borne patiently by others before him in worse situations. He shares their woe in his song, they relieve his misery and ours by their example. Villon's classical studies were weak, but the strophes preceding his refrain 'Mais où sont les neiges d'antan?' show a depth of feeling for bygone love and loveliness that rises above a formal *mahākāvya*. The late Sanskrit poet could not attack the foundation of his own being, for he was attached to society by the slender thread which dangled him from a particular decadent class. He might on occasion have realized that the small recognition for which he strove could endure as little as the spring mist after sunrise. Did he never, as a young wanderer, tread some verdant and springy trail that wound through unknown country into the red glory of the great sun-disc poised on the horizon—thinking to himself, 'may this symbolize the source of my life'; or did the lengthening shadows only make him scurry the faster towards a pitiful shelter within which to cower through the night? There is no doubt that India at all times produced noble spirits who could see the futility of neo-classical writing; but they either took to *vānaprastha* retirement, or to the path of active religion. Neither action produced better Sanskrit literature, because neither affected the foundations of society.

The poetry which we find in our *subhāṣitas* necessarily carries with the rank beauty of an orchid the corresponding atmosphere of luxury, parasitism, decay. Vidyākara's anthology had a hundred years' run, despite the disturbances following the growth of open conflict between Buddhism and Śaivism, before Muslims wiped out *vihāra* and readers. Śrīdharadāsa actually wrote less than five years after the aged Lakṣmaṇasena fled from his capital Navadvīpa (Nadiya), unable to defend himself in his own palace against a sudden raid by no more than eighteen armed horsemen under Muhammad Bakhtyar. *S* shows not the slightest consciousness of the debacle, the king being praised as before, the royal verses quoted profusely with the rest. Rūpa Gosvāmin, a leading disciple of Caitanya, found as little difficulty earlier in serving a Muslim provincial governor in an official capacity as he did later in adopting erotic verses (in his *Padyāvalī*) to the eternal divine love of Rādhā and Kṛṣṇa. Hardly a generation passed between the publication of Jalhaṇa's *Sūktimuktāvalī* and the ruinous attack of Alāuddin. In spite of it all, Brahminism continued its concentration upon theology and pursuit of obsolete philosophical doctrine in stubborn ignorance of reality. One could say that their world had become one of 'doublethink', that they continued 'to hold simultaneously two opinions which cancelled out . . . to use logic against logic.'[31] One could even accuse them of mass-producing verses mechanically, for there exist standard poet's companions giving stock phrases to fit any metre. But they had little choice in the matter, having once started on the wrong path.

The best chances for literary survival are in the front rank of the constant struggle. Bunyan's valiant pilgrim fights his way to salvation, saying 'yet now I do not repent me . . . My sword I give to him who shall succeed me in my pilgrimage, and my courage and skill to him who can get it. My marks and scars I carry with me, to be my witness that I have fought his battles who now will be my rewarder.' For him, death had no sting, over him the grave could claim no victory; the trumpets sounded for him on the other side as they never could for the florid Sanskrit poet or his hedonist patron. I do not recall a single *subhāṣita* in the following vein:

> Bring me my bow of burning gold!
> Bring me my arrows of desire!
> Bring me my spear! O clouds unfold!
> Bring me my chariot of fire!
> I will not cease from mental fight,
> Nor shall my sword sleep in my hand,
> Till we have built Jerusalem
> In England's green and pleasant land.

This is the best of all possible warfare, the only one for a poet. Blake's fight made his own life miserable while making his poetry great; even if the dark, satanic mills against which he fought did not exist in Vidyākara's day, there were other even darker and more satanic objects for a struggle which the poets had renounced, exchanging doubtful comfort for their share of immortality.

If these authors dealt with no major problem of the individual spirit, if they strove neither to burn with a hard gem-like flame nor to free humanity from any of the shackles man has imposed upon himself in making his own history, time has exacted full penalty for the failure. Most of their works and all their biography have been gathered to an oblivion that makes future restoration extremely doubtful. The poetry strives to be and is, at best, exquisite rather than great. Yet, though the voice be thin, it is clear. The field might be limited as to objectives, vision, or endeavour, but excess is rare. The poets speak across the centuries in refined musical tones bearing a soft but indelible charm, visualising an elegant life. The dominant ideal, frankly expressed, is tasteful though not placid lovemaking in luxury—without vice, greed, brutal lust after blood, bourgeois concentration upon money-breeding profit. It is only fitting that their names and verses should not be altogether forgotten.

NOTES

1. The chronology of Rāmapāla and his immediate successors is rather doubtful. R.D. Banerji (*JBORS*. 14. 1928, 489–538) puts Rāmapāla as AD 1077 and 1120, both accepting the reign of 42 years given by Tāranātha. The accession of Madanapāla is now well fixed by D.C. Sircar (*JASB*. Letters, 17. 1951, pp. 27–31) at AD 1144–45. The doubtful element is the existence and position of King Palapāla, whom R.D. Banerji placed in 1126–61, and whom *HBD* neatly dismisses altogether as doubtful (*HBD*. p. 31, p. 172). De la Vallée-Poussin passes the argument by in silence (*DHI*. pp. 100–1), though Banerji returned to the charge in his last paper (*ABORI*. 11, 1930, pp. 398–400). The inscription of this oddly named monarch actually exists in the Victoria and Albert Museum, London, being on the base of an image found at Jayanagar, which was certainly Pāla territory; a perfect plaster cast of the inscription (no. 71–1880 I.S.) was supplied by the kindness of my friend Dr John Irwin of that museum. The extremely corrupt and badly written epigraph can be read in several ways, all of which agree that the king's thirty-fifth regional year was the date of dedication for the image. The actual name could be Palapāla, Acalapāla, or Cāpalapāla. This has been rediscussed by D.C. Sircar in a recent paper in the *JASB*. Letters, without any conclusion differing from that of Banerji except towards the end where the learned epigraphist suggests that Palapāla could have succeeded Govindapāla, who might have been killed about AD 1165 by the Gāhaḍavālas. This contradicts his own reasonable statement in *JASB*. 17. 1951, pp. 27–31, that the reference to the *gatarājya* of Govindapāla indicates that he ruled at least ten to fourteen years after the Gāhaḍavālas had taken over his kingdom. The whole point is: where does this otherwise unknown Pāla with his long reign fit into the Pāla chronology. Even ignoring him altogether, the *HBD* chronology cannot be accepted as it stands, because App. V to Chap. VI (pp. 190–1) discusses King Rājyapāla of the Kāmboja family, to conclude that he was identical with the Pāla king of the same name, whence some of the Pālas ruled simultaneously rather than in succession. I take AD 1100 as a fair date in Rāmapāla's reign, for lack of a better.
2. There was a later Bilhaṇa (contemporary of the Jain *paṇḍita* Āṣādhara) at the

court of King Vindhyavarmadeva (AD 1160–80) of Dhārā. Cf. K.K. Lele in *ABORI*, 11, 1930, pp. 49–53.

3. *JASB*. New Series 7, 1911, p. 619. For fantastic conjectures of Mongol hordes pouring across Tibet into India see *PB*, pp. 63, 68–9; *EI*. 22, p. 153.
4. Varendrī might be placed so as to include the junction of Rajshahi, Bogra, Malda, and an unknown amount of territory to the north. The capital Rāmāvatī, founded by Rāmapāla after his restoration (*RC*. 3. 1–10, Varendrī between the Ganges and Karatoyā—before the latter river changed its course) seems to be mentioned in the Ain-i-Akbari, vol. II (J.N. Sarkar's revised translation, reference by kindness of D.C. Sircar) as a village in Sarkar Jannatabad of Lakhnauti.
5. Jagaddala Vihāra must have been situated at about longitude 88° 24′ 12″ east, latitude 25° 9′ 31″ north. The evidence is as follows. That the Jagaddala Vihāra was in Varendrī seems to follow from the rather obscure *RC*. 3. 7, which mentions images of Lokeśvara and Tārā too. Far more reliable are the references in the Tibetan canon: Vibhūticandra came from Jagaddala in the east, according to *Rgyud*. 4. 14, 16, 17, 24, 33, and 13, 58–60. Most of the Jagaddala references are (due to the Mahāpaṇḍita Dānaśīla) generally as 'in the east.' *cf. Rgyud*. 12. 8. 14. 43–5. The definitive references are *Rgyud*. 26, 50 and 68, 26, which locate Jagaddala in 'Varendrī in Eastern India.' Of course, the name Jagaddala has developed many variants in the Tibetan reports which can be eliminated by collation: Jagatahila, Jagattala, Jagtala, Jagdali, Jagatala, Jagarddala, etc. Tāranātha (p. 244; also Pag-sam-jon-zaṅ, S.C. Das in *JASB*, vol. 67, pt. 1, 1898, p. 25) locates Jagaddala to the east of Vikramaśīla, in the land of Oḍiviśa, which cannot here mean Orissa, if indeed the author has not miscopied his sources.

   The Ain-i-Akbari, vol. II (J.N. Sarkar's revised translation, reference by kindness of D.C. Sircar) gives 'Ganj known as Jagdal' as a Mahal in Sarkar Barbakabad, which was certainly in Varendrī.

   Montgomery Martin's *Eastern India* (3 vols, London, 1838; the book is actually by Francis Buchanan, the original manuscript having been simply plagiarized by Martin) shows Jogodol as a thana at that time belonging to Dinajpur District (vol. II, map opposite p. 582). Vol. II, p. 642, describes the thana in the words of the traveller Buchanan. 'There are considerable remains of antiquity; but the death of the Darogah just before my arrival, and the ignorance of the people about the thanah, prevented me from hearing of them in time; so that I was unable to lay down a plan for visiting them.'

   H.H. Phillips, Superintending Surveyor of the Eastern Circle, informs me that the village Jagdala still exists in what is now Malda District of East Bengal, about four miles SE of Bamangaon; the longitude is 88° 24′ 12″ east, latitude 25° 9′ 31″ north. This information is based on the Survey of India's map sheet 78 *C*/8 of 153. This seems to be all that remains of the great Jagaddala-mahāvihāra, and more than has been located in previous works like *PB*, *HBD*, etc.
6. The royal patronage of Jagaddala is attested by the *Tarkabhāṣā* of Mokṣākaragupta (*GOS*. XCIV, 1942; *Mdo*. 112. 28), who is described at the end (p. 39) as *śrīmad-rāja-jagaddala-vihārīya*, and begins his work by a salutation to Lokeśvara. *Mdo*. XV has a most important colophon whose meaning remained obscure even to Cordier perhaps because of this extra word *rāja* modifying the abbey. Gokhale

renders the colophon as follows: 'This *vyākhyā* was composed by Rāja-jagaddala-nivāsī [which thus becomes the writer's name] at the Jagaddala vihāra, which was the place of Rāmapāla's coronation. It was transcribed at the Mahābodhi temple by śrī-Mānapāla in the seventh year of the coronation.' The two—*pālas* have been, not unnaturally, confused. Presumably, the reference to Jagaddala having been built in the seventh year of Rāmapāla's reign as stated by Rahula Sankrityayana in his Hindi *Tibbat meṃ Bauddhadharma* (Banaras, 1935, p. 30) derives from this same colophon of *Mdo.* xv. R.D. Banerji, *Mem. ASB.* V, 3, pp. 43–113, follows Haraprasad Sastri's translation of *RC* to ascribe the construction of Jagaddala to Rāmapāla (p. 91), while the location given on that page was based on misinformation, corrected ibid., p. 113.

7. Buddhism and the religion of *ahiṃsā* cannot be held responsible. The Jain Khāravela boasts of a long series of victories. Aśoka did not abolish capital punishment. Harṣa forgave the assassin, but eagerly sought every battle. Jenghis Khan was a Buddhist too. The religion (like others) made intercourse within a society smoother, which often meant externalization of the inner conflict, hence great wars. Even when the problem of peace is finally solved (by whatever methods), literature will suffer no loss, for man's real struggle, the never-ending war against his material environment, the collective fight for sustenance, conquest of nature, defence of all humanity against storm, flood, pestilence—all these give maximum opportunities for discipline, generalship, individual valour. For our purpose, it suffices to note that the Buddhist attitude towards sex did not interfere in the least with erotic literature; it follows that *ahiṃsā* need not have inhibited martial literature.
8. Having been born and, for some time, brought up in what remained of such great patriarchal households, I can vouch for the fact that life had its own special duties and worries and that in actual fact lovemaking took up a very small proportion of their time and energies.
9. F. Kielhorn, *Bruchstücke Indischer Schauspiele in Inschriften zu Ajmere* (*Abh. d. Ges. Wiss. Göttingen*, 1901) for the *Lalita-vigraharāja-* and the *Harakeli-nāṭaka*, the Ajmer inscription being dated AD 1153.
10. Maximus, who fought and lost to Theodosius for mastery of the Roman Empire, is the Maxen Wledig of the *Mabinogion*, and of the *Wayland Smith Saga* (Song of Wayland). For the Connétable Bourbon, F. Gregorovius, *Geschichte d. Stadt Rom im Mittelalter* 14. 6. 3; Dovator was a Soviet leader in the war against Hitler.
11. The early Guptas are despised local rulers, according to the Purāṇas (F.E. Pargiter, *Purāṇa Text of the Dynasties of the Kali Age*, pp. 53, 73). So the high Sanskrit of Gupta inscriptions and the certainty that Kālidāsa was their court poet prove my statement. For Rudradāmaṅ, the Girnār inscription of *circa* AD 150, *EI.* 8, pp. 36 ff, bears testimony.
12. On the other hand, rulers considered rude and almost illiterate are surprisingly found to have had some Sanskrit education, and to have followed the panegyrics written for them in that idiom. The Marāṭhā king Sambhājī (AD 1680–89) is so praised by Hari Kavi (P.K. Gode in *ABORI.* 18, 1937, 287–95; 1, 4–60). Family manuscripts of the Udaipur house showed considerable handling of a pedagogic volume into which were bound such beginner's works as the *Pañcatantra* and

Bhartṛhari's *śatakas*. The book, when I examined it, opened naturally to the *Anaṅgaraṅga*, on a page with the prominent sub-heading *liṅga-sthūlī-karaṇam*, so that knowledge of Sanskrit seems to have been put to practical use at court.

13. Vidyākara has 147/1739 stanzas for the gods; Śrīdharadāsa not less than 370/2380; Nandana rises to 470/1428.
14. *NDC.* p. xiv for Mañjuśrī as Madana, and also the *female* Padmā Kumārī (cf. Getty, p. 78, for Avalokiteśvara as the *goddess* Kuan-yin), besides being the Hindu Tantric god of poetry; see also *NDC.* p. lxvii.
15. H.C. Raychaudhuri in *An Advanced History of India*, pt i (jointly with R.C. Majumdar and K. Datta, 2nd ed., London, 1950), p. 160, seems to think that Harṣa established these on three successive days, at the time of Hsüan Tsang's visit; there is nothing of this in the extant translations of the Chinese traveller's account. Beale, I. 222–3 shows that the three foundations did exist and were well maintained at the time, near the capital city Kanauj.
16. For Harṣa's titles, G. Bühler's ed. of the Madhuban copperplate, *EI.* 1, pp. 67–75; on p. 74, Harṣa is himself *parama-māheśvara*, Rājyavardhana the first *paramasaugata* of the line, all predecessors being *paramādityas*; also *DHI.* p. 86. The obscure ancestry seems to point to a tribal origin (*DHI.* pp. 78–80), as particularly the election according to Maukhari tribal right followed by joint rule with his sister and Grahavarman's widow, on the throne of Kanauj.
17. Cf. *JOR* 19 (1952), pt 2, supplement, the *Cintāmaṇi-Sāraṇikā* of Daśabala.
18. Beale. I. 219–21; the 'heretics' also set Harṣa's great and costly *saṃghārāma* on fire, though the building survived.
19. Beale. II. 118; Pūrṇavarman of Magadha, described as the last descendant of Aśoka, restored or replanted the tree, with a protecting wall.
20. With Vikramaśīla monastery also; *Tār.* p. 254 and *Tabakāt-i-Nāsirī* (trans. Raverty), p. 552. The fortification is clearly not for using these locations as military bases, but for their safety, which implies great wealth, and imminent danger from robbers who at the stage would not be Muslims. The Buddhist faith no longer rendered the *vihāras* immune.
21. *HBD.* pp. 21, 401, etc. Also *IB.* 3, pp. 85, 94, 101, etc.
22. The *Durjana-mukha-capeṭika* of Vaṃśīdhara (*BORI*, 698 of 1887–91) is one of many examples. Intermarriages between *smārta* and *vaiṣṇava* sections of the same Brahmin subcaste were virtually forbidden till the end of the nineteenth century, the case of Appayya Dīikṣita being a notable exception. My parents broke a long tradition of this separatism among the Goa Sārasvats, but the economic picture had changed completely by then.
23. This is my interpretation, possibly subject to dispute, of the preface to the *Gīta-govinda, CSL.* 294, and *Gītagovinda* 2. The *Ādi Grantha* poems, in badly mutilated form, are the *Rāg Gujarī* and *Rāg Mārū* (*HBD.* p. 369, note 2, p. 390).
24. S.K. De, *Vaiṣṇava Faith and Movement in Bengal* (Calcutta, 1942) reports (p. 60) only the beginnings of this in Caitanya's own day, though the general Bengali tradition is as I have given it. In spite of admitting men of all castes and even Muslims, Caitanya did nothing to remove caste barriers (De, pp. 80–1, 394, etc.) which seems to have been Nityānanda's approach. For our argument, the

essential is that Kṛṣṇa (as distinct even from Viṣṇu in general) is a popular, quite human divinity; a shepherd, not a patrician. *Bhakti* here meant something much simpler than devotion to the lordly Śiva, which was more like homage to a high feudal lord. The song, dance, and ecstasy, the festival aspects of Vaiṣṇavism, which Vidyākara never saw, were far more attractive than the once primitive but always dreadful and repulsive-rites for Rudra and Kālī. Vaiṣṇavism continues and completes (as no classical Sanskrit poet could) the general trend of our anthology in the coalescence of sex and religion, their joint sublimation and transfer to the social level.

25. *DHI*. 127; *IHQ*. 9, pp. 955–6; the interpretation, due to Sten Konow *EI*. 5, 115, 9. 303, 321, etc., seems reasonable; but it is often contended that the tax was originally levied as tribute-money for the Muslims, to purchase immunity from their raids.
26. Copperplate of Kadamba Jayakeśin, *Bhārata Itihāsa Saṃśodhaka Maṇḍaḷa Quarterly* (Poona, 1951), 31. 4, pp. 27–39; for the boat-tax in support of the mosque, G.M. Moraes, *The Kadamba Kula* (Bombay, 131), pp. 168–70, 186, etc. For Veraval (Somnath), H.C. Ray, *Dynastic History of Northern India* (Calcutta, 1936) vol. II, pp. 1038–9; *IA*. 11, 241–5. It is generally remarked that the Muslims failed to return the compliment!
27. *Tār*. pp. 251, 254–6. The Turuṣka king 'Candra' (Tibetan *zla-ba*, later pronounced *dāvā*) can only be Mahmud bin Bakhtyar. The narrative, not to be doubted, makes it clear that the first symptom was the sudden increase in the 'Anhänger des Mletschtscha-Systems der Tadschiks,' followed by military operations, and defection of many followers of the Nātha sect to Śaivism—according to Tāranātha, out of pure opportunism.
28. Cortes with his Tlascalan allies was decidedly superior to the Aztecs; but with the equivalent armament, Vasco da Gama and Albuquerque made far less headway in India. Their successors were forced to take to trade, as the Spaniards might have done if the conquest had not been so easy and tempting. Portuguese missionary zeal was second to none, but it did not pay to exercise it by force of arms.
29. Tāranātha reports sadly '. . . in Magadha war die Lehre aber wie erloschen. Obwohl zu der Zeir viele Zauberkundige und der Zauberei ergebene weilten, gab es keine Mittel, um zu den auf das Wohl des Wesen bezüglichen Werken zu bekehren.' For the mantra-yāna, *Tār*. pp. 275–8. The Dharma cult seems to start about this time, *JASB*. 1894, 65, pt i, pp. 51–64; I also suggest that this spread to the south, and is the Dharmarāja of the Tigaḷas at Bangalore.
30. This is as I interpret the mixed findings of Haraprasad Sastri, as reported in his obituary, *IHQ*. 9. 1933, pp. 307–416, particularly pp. 367 ff.
31. This apt description is actually what George Orwell imagines would apply to his nightmare of a 'socialistic' world in 1984.

SECTION V

Reviews and Rejoinders

44

The Emergence of National Characteristics Among Three Indo-European Peoples*

The French historian Fustel de Coulanges pointed out striking parallels between the ancient institutions of three prominent Indo-European peoples: Greeks, Romans, and the Indic Aryans. The literary quality of his book, *La Cité Antique*, did not, however, obscure the fact that more questions were raised than settled by his explanation. His thesis, that the three civilizations were founded in prehistoric times upon the cult of the dead, did not make clear why they should have diverged so widely even in antiquity. Of course, a great deal of his data would now have to be revised in view of the fact that the three groups seem to have derived much from an earlier cycle of civilization represented in Mesopotamia by the earliest cuneiform records and in India by the Indus valley finds. Whether the groups mentioned above derive their similarities from a common racial origin or from contact with the same older culture, the differences will have to be explained.

Mommsen has shown[1] that, even in early times, the Roman lost his individuality to become part of a remarkably systematic and comprehensive social organization. His personal name was represented by an initial and he was known, to others than the members of his family, by the name of his *gens*; in contrast, the Greek lost his family name to become, and to function as, an individual with greatest of personal liberty. With the growth of individualism in Hellas there came the characteristic development of art, philosophy, science, and literature; but the Greek state was much weaker than the Roman. All this, according to Mommsen, is due to

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national character. As a matter of taste, we should now regard the national character as a symptom and not as the primary cause of these achievements. To explain the divergence, it will be necessary to see what early differences existed in the means of production open to these two offshoots of the same race (if such they were). We must try to analyze *the stages that gave direction to later developments*. Of course, the earlier similitudes might also be explicable in this way, but that would involve re-examination of Engels's famous work on the origin of the family[2] in the light of modern research. The necessary dissection and rearrangement of available data is beyond the scope of this brief inquiry, which restricts itself mainly to the stage of emergence.

We know that the Greeks had a considerable but not overwhelming conquered population in the land occupied after the Aryan (Danaan or *dānava*) invasion. Their production had necessarily to be based upon slave labour. The land in Greece is fertile only in small valleys separated by barren hills, so that a powerful incentive was given to its fragmentation into small agricultural communities. In the absence of any external influence, petty warfare among themselves would have absorbed all Grecian energies. But many of them took to the sea, progressed inevitably from piracy to trade, and began manufacture for export. We thus have the beginnings of that Athenian glory which has cast an attractive light over the rest of Greece, but which is due less to the 'inner genius' of the people than to the *unfolding* of a new and superior form of production: industrial capitalism. The Solonian constitution,[3] from which the great period of Athens starts, is a document that attests my contention. Freeing citizens from debt-slavery, inflation of the currency by legalized debasement, a moratorium on debts, all point to the real nature of this new democracy. The brilliant literary and artistic developments are, along with the 'national character', the flowers that adorn this new growth. With the hardening of this form of production, the growth of imperialism and inner strife among the constituent classes, i.e. the ripening of dialectical contradictions, the culture also deteriorated; though with a time-lag which must be greater, the more primitive the society and its production.

By contrast, the inland and mountain Greeks show comparatively little, if anything, in the way of culture. To drive the point home, we can show that one state at least gave up industrial development and thereby lost its cultural start: Sparta. As is now known, the Spartans had the earliest Greek (as distinct from Pelasgian or Mycenean) architecture, represented by the temple of Gittyadas. They appreciated the poetry of Tyrtaeus. Their institution of kingship dated to Homeric antiquity. But the Iliad as we have it today is in an Athenian recension, or at least, not a Doric poem. Throughout the historic period, the Spartans are nothing except doughty fighters, the 'artists and craftsmen of war'; always feared, sometimes admired, but never imitated by their contemporaries. The root stage of this form can be discerned with a fair amount of certainty as the first Messenian war. The Spartans had to fight for their very existence and at the end of this period Sparta emerges as the armed camp that it remained for the duration of its historical importance. Thereafter, the Spartans lived the life of soldiers at war, conducting in effect a ceaseless warfare upon their own landslaves, the helots who were the foundation of Spartan agrarian economy. The citizens lived a life so bare of all luxury as to have become a byword; with physical weakness were abolished such mental weaknesses as art, literature, philosophy, science. They are supposed to have abolished the institution of money too, but some form of land-capital certainly survived. The simplicity and bareness of a Spartan's life must not be confused—as ancient historians did—with the absence of wealth, that is to say, the absence of uneven control over the current means of production. At the end of Spartan history, king Agis found that there remained only nine hundred Spartans wealthy enough to be called citizens, i.e. to pay their mess dues for the common table. The Spartan form of exploitation was surely less productive if more in accordance with primitive types. No new cultural developments were to be expected from it. As a final aside, I might add that even in war they were ultimately beaten by people who allowed their citizens to develop more imagination, though the Spartans were numerically superior. The tactics of Iphikrates and both the tactics as well as the strategy of Epaminendas showed that the much admired Spartan rigidity of character was not the best training for military leadership.

Like the Greeks, the Latins acknowledged a community of origin; but the land in Latium is fertile in much larger units than in Greece, and there was no conquered population there so far as can be discerned. The sole trading community that could be formed had necessarily to control the only available harbour, the Tiber mouth from Ostia to Rome. But what taught the Romans to absorb the Latins or to make allies of them, in contrast to the extraordinary separatism of Greek cities? What is the basic fact, unknown to Mommsen or not significant enough to his mind, that gave this turn to Roman development? His theory of 'racial traits' can hardly be applied because the Etruscans, whom he despises so much, had, according to legend[4] and archaeology,[5] more influence upon early Rome than any other people. The unemphasized significant fact is that the Romans were lake-dwellers at one period of their migration. Excavations in north-Italian lake-beds show this as well as the fact that after taking to dry land, the proto-Latin villages continued to be built on piles[6] for some time. In the north, lake-dwelling must have been necessary for protection against overwhelmingly strong hostile tribes. The most important priest in Rome was not known as the fire-tender (*flamen*) but as bridge-builder (*pontifex*).[7] This is explained rather lamely by the older historians, Mommsen[8] among them, by saying that the construction of a bridge across the Tiber was vital to trade and its destruction in the event of an attack (legend of Horatius) necessary for defence. That is true; but for lake-dwellers who have no other means of communication with the mainland except a few boats, the bridge is far more important than to any community on land, whether near a river or not.

The pontifex would be the person who had charge of the bridge-building and repair. This meant not only a certain amount of technical knowledge, but also control of the ritual that inevitably accompanies any primitive enterprise. The older traditional priesthood could get along on ritual alone, but the bridge had to be sound and, in fact, all the lake-dwellings and the *terramare* houses were knit together by the same method of construction that was applied to the bridge itself. This extreme compression of the whole community must have led to the sort of discipline seen in a factory or on shipboard, but deeper in that the citizen had to pass his entire life from birth to death in such surroundings. There was no closing time as for a factory, no end to a ship's voyage that might be anticipated by the crew. The community that did not cooperate very closely in all matters could not survive. Even a trifling carelessness in such matters as fire would have been fatal beyond recovery. The stiffness of Roman character, its emphasis upon legality and discipline, must have its roots in the lake-dwelling period.

With the change to an agrarian life, the character would have eventually changed in spite of the fact that there were not many slaves to be exploited, and that the little villages imitated lake-dwellings as much as possible. But one community found the earlier methods necessary for its own survival. The Romans needed the bridge and had to cooperate against frequent attacks from the north. The common origin of the Latins made it possible to increase the original city-state, itself a union of diverse settlements upon the seven hills, by the adoption of strangers into citizenship; not only as individuals but by the *gens* (Attius Clausus and the Claudii).[9] Man continued to function as the member of a social unit, not as an individual. Where the other Latin cities remained small agricultural communities, Rome alone grew. One very important result of this form of expansion was that at an early stage there was no serious internal strife between the aristocracy and trade-capital as in Greece. Throughout the early period of Rome, the two were more or less identical and the principle of adoption could always be extended to the creation of new senatorial families when non-patricians became rich enough. Because of the absence of mines and harbours, the chief exports were grain, slaves, and wool. As manpower was essential, the proletarii received more consideration than in Greece. When capital finally takes over in Rome, it is naturally as finance capital, on a much larger scale of accumulation[10] than seen before in the Mediterranean world.

In India, we shall have to explain the caste system as the chief variant from the other two Indo-European developments. At the very outset we encounter the difficulty that Hindu traditions are characterized by a total lack of any historical or critical sense. In spite of the considerable mass of Indian literature, it was impossible to make any trustworthy statement even about kings like Aśoka and Samudragupta who had ruled most of the country. What accurate knowledge we have of these dates from the period when western scholars collected and deciphered their inscriptions. So we shall have to resort to conjecture more often than for the Mediterranean culture. On the other hand, I shall try to explain this particular national trait—the lack of any feeling for history—also on a materialistic basis.

It is tempting to believe, even if proof be impossible today, that the Vedic Aryans destroyed the Mohenjo-Daro civilization. In any case, it is fairly clear that a people culturally superior to the Aryan pre-existed in India and that a considerable number survived the conquest. The majority must naturally have sunk to serfdom or helotage, but the culturally advanced priests of the conquered[11] were able to impose themselves upon the conquerors in spite of racial differences. The Aryan priests must have been absorbed because of the more imposing ritual of the pre-Aryans. Something of this sort can be seen in Mesopotamia after the Sumerians had been conquered. The mechanism in the Indian case has only begun to be clarified after the recent discovery by Sukthankar[12] of the method by which the present *Mahābhārata* text was inflated. It appears probable from his work that the ritual and traditions of the conquerors passed into the hands of the *Āṅgirasa* clan[13] and were later taken over by an associated Brahman clan, the *Bhārgava*. The caste system had a racial origin, as is clear from the theoretical ban on intermarriages and from the name *Varṇa* (colour, complexion) for caste. The actual rule was in the hands of the fighters, the conquerors, who became the *kṣatriya* or warrior caste; the Brahmans, though the highest caste in theory, served these as priests and scribes; the *vaiśyas* were traders; lowest of all came the majority, the *śūdra* or worker caste.

The importance of the fact cannot be overestimated that a clan of the beaten people had full control of the tradition and of the ritual of their conquerors. They used this monopoly for writing in, without troubling themselves about consistency, whatever suited them, either to appease the conquerors or to keep up their own pride. For example, we find in the *Mahābhārata* that the comparatively insignificant Bhārgava hero Paraśurāma *exterminates* the *kṣatriyas* no less than twenty-one times[14] in revenge for the destruction of his own people. It is fairly clear that the revenge in this case was taken by the composer of the legend, not by the impotent hero; as such, it naturally betrays the psychological characteristic of overcompensation. A single extermination of the kṣatriyas would have sufficed to prevent the Brahmans having to serve them. The foundation of the national trait mentioned, i.e. the lack of a critical attitude, particularly towards historical events, was laid with the foundations of the caste system by the *kṣatriya* conquest. For the rest, the usefulness of an uncritical revision of old legends continued till well on into the historical period, one striking instance being the recasting of the *purāṇas*; the absorption of conquering tribes of invaders followed the same model, as for example in the case of the Scythian Rajputs.

But the function which helped to preserve the caste system is more important than that of rewriting legends. The system itself can hardly ever have been applied in its full rigiour and simplicity over any considerable extent of territory at any time. Its origin is clearly local; its spread due to the fact that it represented the actual balance of social and economic forces with accuracy. The most important function of the system was to prevent the worker, the *śūdra*, from learning the use of weapons and from learning to read and to write. He had no share in the culture of his age and country. He could not resort to armed revolt. There remained no way for him to keep his traditions alive, if indeed he had had any in the pre-Aryan days; no means of expressing his agony or communicating extensively with his fellow sufferers: no escape except through religion. Even a change of rulers did not bring about a change of caste. The Brahman relieved the warrior caste of the need of constantly policing the state to prevent an armed uprising. The benefits of an extensive helotage were obtained without Spartan efforts. Whether the state was an oligarchy, a republic, or a monarchy (all three existing in the sixth century BC in India) the worker had nothing to expect from it. On the other hand, his submission had also the effect that the extreme forms of slavery which we see in Rome and Greece, human beings bartered like cattle, were not needed as a basis of production in India. The rare Indian slave is usually a servant in bondage to some person or household, but not an article of trade. *The caste system corresponds to our modern censorship and the present Indian Arms Act together.* But it must not be forgotten that in its initial stages, the caste system represented a reorganization of society that was more vigorous and more productive than the pre-existing form. It enabled new regions in the forests and mountains to be opened up and settled, whereas the older culture, no matter how highly developed, was essentially a static type that could survive only along the fertile banks of a river which flows through the desert, so that agriculture and protection from wild beasts and invasions could be obtained from the geographical circumstance, not from the social organization. The Indus valley people had no fighting weapons to speak of; war was not their trade.

The Indian peasant had nothing to lose from any new conquest, and continued to plough on calmly[15] while armies fought for sovereignty over him in sight of his little patch of soil. This led to that peculiar type of indifference and stagnation which struck Marx in his studies on India: 'We must not forget the barbarian egotism which, concentrating on some miserable patch of land, had quietly witnessed the ruin of empires.[16]'

Although what follows does not concern the *emergence* of a national trait, I should like to show that the caste system was well grounded. Otherwise it would not have survived the Buddhist epoch nor the Mohammedan invasions. The Buddhists caused the Brahmans a great loss of prestige by their practical doctrine of non-killing (*ahiṃsā*) which was better balanced than the older but exaggerated Jaina *ahiṃsā*. Constant petty warfare was beneficial to the Brahmans as they enjoyed the fees for the innumerable sacrifices performed by petty rulers for victory over the enemy. *Ahiṃsā* did not contradict the desire of the trader for safe routes; that was ensured by the growing size of the individual kingdoms which began to tend towards 'universal monarchy', a movement helped by Buddhism[17] as is clear from the success of Aśoka. The peasantry benefitted because the ravages of war had usually been aggravated by the unpaid confiscation of stock for the sacrifices (*yajña*). But even when these gains were consolidated by the growth of larger states, Brahmanism survived because the Buddhists did not provide a new ritual; the old priest-caste still had control of ceremonies such as marriage; and as the

Buddhists could not propitiate any deity, the Brahmans had an enormous survival value. The Buddhist doctrine did not change the means of production, did not free the workers. After absorbing enough of the new doctrine to keep abreast of the times, and after unifying innumerable local deities as various manifestations of comparatively few chief gods, a tendency which shows the theological parallel to the growth of large states, the Brahmans regained their old position while Buddhism vanished. The latter religion had become uneconomic by reason of huge monasteries and their extensive holdings in land. It could survive in outlying places like Tibet where monasteries took over the administration or where there had been no Brahminism; but in competition with the secular Brahmanic forms current in India, it was wasteful, less productive, obsolete.

Islam had a greater initial success, being a strong, intolerant, iconoclastic religion, with full religious democracy for all its members. But no conqueror who is a stranger to the conquered can permanently impose his dogmas upon the country without freeing the oppressed classes, or without a Spartan extreme of violence. The one step that would have uprooted Hinduism from the land would have been the gift of the land to the man who cultivated it, assuming of course that there was enough land to go around. But the Moslems had no such economy in their own country and could not have imagined its introduction into any other, particularly as their initial aim was the exaction of heavy tribute. In spite of their desire to convert, the cleverer invaders realized that it paid not to give way to fanaticism. The temples and idols naturally accumulated a store of wealth that could be cleaned out periodically,[18] but which was lost with the destruction of the temple and by extreme religious intolerance.

As Marx predicted,[19] the latest conquest of India, being founded upon an entirely different economic structure, is changing the country altogether. That the new forms of production have not yet taken hold as deeply as they ultimately must can be made clear by a brief analysis of contemporary Indian national economy. But I give the following parallel quotations to show that the character of Indian science has yet to be completely changed, and that the charge of an uncritical approach persists through the centuries.

Alberuni (AD 1030)

> . . . You mostly find that even the so-called scientific theorems of the Hindus are in a state of utter confusion, devoid of any logical order, and in the last instance always mixed up with the silly notions of the crowd. . . . I can only compare their mathematical and astronomical literature, as far as I know it, to a mixture

of pearl shells and sour dates, or of pearls and dung, or of costly crystals and common pebbles. Both kinds of things are equal in their eyes since they cannot raise themselves to the methods of a strictly scientific deduction.

Alberuni's India (trans. Ed. Sachau),
London, 1888, vol. I, p. 25.

J.D. Bernal (AD 1938)

Indian science is noted at the same time for the originality of many of its conceptions and experimental processes, and for extreme unreliability and lack of critical faculty in carrying out the work itself. . . . Probably the best workers in Indian science today are not the scientists but the political agitators who are struggling towards this end [freedom for India].

The Social Functions of Science, p. 208.

NOTES

1. Theodor Mommsen, *Römische Geschichte* (1903) vol. I, pp. 23–5.
2. F. Engels, *The Origin of the Family, Private Property, and the State*, trans. E. Untermann, Chicago 1902.
3. George Grote, *History of Greece*, Part II, chap. XI.
4. The legends of Tarquin and Mastarna. *Cambridge Ancient History*, vol. VII, chap. XII, section iii. See also pp. 382–3 of the same volume for other Etruscan influence.
5. Eugénie Strong, *Art in Ancient Rome*, London 1929, vol. I, pp. 12, 16–20.
6. Ibid., pp. 3–5; *Camb. Anc. History*, vol. VII, pp. 333–7. V. G. Childe, *The Aryans*, p. 71.
7. The popular tradition is given by Plutarch in his *Numa Pompilius*. Cf. the Modern Library translation of the *Lives*, p. 81.
8. Mommsen, *loc. cit.* p. 169. Of the *pontifices* in general, 'Es waren die römischen Ingenieure, die dass Geheimnis der Masse und Zahlen verstanden'.
9. *Camb. Anc. History* VII, pp. 373, 416, 420, 470. On pp. 420–5, we are led to the conclusion that the class-difference between patricians and plebeians was not racial in origin.
10. For the change of national character with the rise of the Roman financier, G. Ferrero, *Grandezza e decadenza di Roma* vol. I, chap. VII (Milano 1927) pp. 210–11. Cf. also p. 59 et seq. Mommsen, *loc. cit.* pp. 845–6 says, 'Den Geldsuchenden vorzuschiessen fing schon im ganzen Umfange des Reiches an sozusagen Monopol der Römer zu werden . . . Eng damit verwandt war das unermessliche Gebiet der Entreprise . . .' For the large accumulations, ibid., p. 849: 'Was man in dem damaligen [i.e. in the time of the younger Scipio Africanus] Rom unter Reichtum verstand, kann man ungefähr danach abnehmen dass Lucius Paullus bei einem Vérmögen, von 100,000 Talern (60 T.) nicht fur einen reichen Senator

galt, und dass eine Mitgift wie jede der Tochter des alteren Scipio Africanus sie erhielt von 90,000 Talern (50 T.) als angemessene Aussteuer eines vornehmen Mädchens angesehen ward, wahrend der reichste Grieche dieses Jahrhunderts nicht mehr als eine halbe Million Taler (300 T.) im Vérmögen hatte'.

For the mechanism of exploitation (in the time of Cicero) see *Camb. Anc. History*, IX, pp. 470–2.

11. The *Atharva Veda* is a document of the *Āṅgirasa* clan, the *Manu-Smṛti* of the *Bhārgava*. For the relations between the *Āṅgirasa* and the *Aila* or Aryan traditions, cf. F. E. Pargiter, *Ancient Indian Historical Tradition*, London, 1922; particularly pp. 319–20.
12. Dr V.S. Sukthankar, Epic Studies VI, *Annals of the Bhandarkar Oriental Research Institute*, Poona, 1936, vol. xviii, pp. 1–76.
13. Dr Sukthankar has called my attention to the fact that a rudimentary caste system and the *Āṅgirasa* clan are both known among the Avestan Iranians. The main thesis of my work, that the Indian caste system was founded on the actual organization of the means of production, is not affected by this. On the other hand, a very interesting question is raised as to the origin of the system itself. That it did not prevail among the Aryans in general can be seen from V. Gordon Childe's important study *The Aryans* (London 1926). I have not enough data for a discussion of the original home of caste or of the *Āṅgirasa* people. But it is to be noted that the *Āṅgirasa* clan disappears early in India, to be replaced by the still extant *Bhārgava*. If, as seems likely, the slaughter of the Brahman king *Vṛtra* involved the *Āṅgirasa* in India, the demonization of *Indra* and the *daevas* in Iranian mythology might be an expression of the enmity felt by the *Āṅgirasa* surviving outside. The possibility has also to be admitted that the *Āṅgirasa* element written into *Sanskrit* Aryan records might be due entirely to later *Bhārgava* redactors, who could have used it as the common property of all Brahmans.

    For the rest, while admitting the value of Childe's discussion, it must be pointed out that his objection (*loc. cit.* p. 32) to Pargiter's theory of an early Aryan occupation of the upper Gangetic basin is made less serious by the discovery that the Himalayas continued to rise even in historic times, and that passes like the Zogi-la were comparatively easy in the stone age. There is also the possibility that the migration from central Asia or the Punjab indicated by accepted analyses of concentration of the blood-group gene *B* might be associated with the Aryans themselves. Personally, I think it probable that this is pre-Aryan; it is known that the conquered and especially the non-fighting elements among them tend in general to breed much more rapidly than the fighting conquerors.
14. Sukthankar, *loc. cit.*, in particular pp. 41–2.
15. As nearly as I can recall, this indifference has actually been reported by some observers, perhaps in pseudo-Megasthenes. I am unable to trace the reference at present.
16. Karl Marx on India. Letter of June 10, 1853 published in the *New York Daily Tribune*, June 25, 1853. Cf. p. 21 of the Socialist Book Club edition of *Marx and Engels on India*. For the future results of British rule in India, Marx's letter of that title, written July 22, 1853 published *N. Y. Daily Tribune*, August 18, 1853.

17. These aspects of Buddhism have been discussed by my father, Prof. Dharmananda Kosambi. Details will be found in his Marathi writings such as *Buddha, Dharma, āṇi Saṅgha; Hindī Sanskṛti āṇi Ahiṅsā.*
18. *Alberūni's India* (trans. Ed. Sachau) London 1888. Vol. I, p. 116 for the first Moslem invader Mohammed ibn Alqasim sparing an idol for profit. The tradition continues till recent times, and is told among others of Haider Ali in the Deccan.
19. Vide footnote 2.

45

Race and Immunity in India*

In June 1939, a high official of the German army named Lamotte wrote two letters inquiring about the remarkable health reported to be prevalent among the Hunzas. A local anthropologist having been 'unable to give any information regarding these' the letters were sent to me for an answer. Relevant portions of the original letters and my answer of July 14, 1939 are reproduced here in the hope that others may be able to contribute to the subject.

June 12, 1939

Der frühere Generalarzt der indischen Armee Mc. Carrisson berichtet von einem Volksstamm der Hunza's im Nordwestzipfel von Indien am Karakorum, dass dieser das gesündeste Volk der Welt sei, selbst der sonst tötlich verlaufende Milzbrand verursache bei den Hunzas nur eine leichte Rötung der Haut. Ein anderer Engländer Lorimer hat festgestellt, dass bei den Hunzas, die von allen Fremd-Einflüssen frei geblieben wären, das Burschaki gesprochen wird, es soll die nord-indische Ursprache sein, die gesprochen würde, bevor die Sansckrit sprechenden nordlichen Völker nach Indien einfielen.

Mich interessiert nun vor allem folgendes: Wenn die von Norden einfallenden Völker, nicht zu den Hunzas gekommen sind und diese im Gegensatz zu den anderen Indern sich 100 per cent Gesundtheit erfreuen, dann müssen mithin die einfallenden nördlichen Völker einen unheilvollen Einfluss auf die indische Urbevölkerung ausgeübt haben und damit würde die so gerne bei uns vertretene Ansicht falsch sein, dass die von Norden gekommenen Eroberer erst Indien zur Blüte gebracht haben.

**New Indian Antiquary*, vol. 6 (1943–44), pp. 29–33.

Man könnte dies vergleichen mit dem schlechtem Einfluss der Zivilisation des weissen Menschen auf andere Völker. Ueberall wo der weisse Mensch hingekommen ist, ist die ortseingesessene Bevölkerung krank und unglücklich geworden, und der weisse Mensch bringt sich ja auch selbst langsam aber sicher um.

Ich wäre Ihnen nun sehr dankbar, wenn Sie gelegentlich eines Schreibens an Ihren früheren Chef diese Punkte berühren würden und ihm um seine Auffassung über die Hunzas fragen würden. Sind sie wirklich so gesund, dann verlohnt es sich doch auch so zu leben wie sie, denn kein Reichtum ist grösser als Gesundtheit.

[*June 12, 1939*

Reporting about a Hunza tribe, in the north-western tip of the Indian Karakoram, the former Surgeon General of the Indian Army McCarrisson observed that these are the healthiest people in the world, though they did have a mild reddening of the skin caused by a dysfunctional anthrax. Another Englishman, Lorimer, established that the Hunzas, who have remained free of all foreign influences speak 'Burschaki', an original language of North India, which was spoken before the Sanskrit speaking people descended on India from the North.

I am only interested in the following. If the invaders from the north did not descend upon the Hunzas, who in contrast with the other Indian population [of today] are 100 per cent healthy, then the invading northern people must have exerted a very unhealthy influence over the original inhabitants of India. Thus, the opinion so readily endorsed by us, that the invaders from the north were the ones responsible for India's blossoming, is false. One can compare the adverse effects of the white civilization over other people also. Generally, wherever the white man has gone, the local population has suffered from illnesses and bad luck and the white man slowly kills himself too.

I would be grateful to you, if you would at some point write to your former boss and touch upon the point and inquire about this new conception about the Hunzas. If they are really that healthy, then it pays one to also live like them, as there is no wealth greater than health.

Lamotte]

June 20, 1939

Meinen an Frl. Frundt gerichteten Brief vom 12. 6. 39, der Ihnen ja zugeht, kann ich noch ergänzen. McCarrison schreibt über die Hunzas: 'Die

einzige Nahrung dieses Volkes besteht bis heute aus Getreidekörnern, Gemüse und Obst, mit einer gewissen Menge von Milch und Butter, und Ziegenfleisch nur an festlichen Tagen. Die Nahrungsmenge ist so knapp, dass sie in der Regel keine Hunde halten können. Ausser den Körnerfrüchten—Weizen, Gerste und Mais—reifen reichliche Ernten von Aprikosen. Diese dörren sie in der Sonne und verwenden sie ausgiebig in der Ernährung. Die lebensdauer ist bei diesen Leuten ausserordentlich lang. Wenn man die Strenge des Winters in diesem Teil des Himalaja in Betracht zieht, wie auch dass ihre Haus und Schutzeinrichtungen überaus primitiv sind, so erscheint in Evidenz, dass die notgedrungene Beschränkung auf unverfälschte Nahrung sich mit langer lebensdauer mit ausdauernder Lebenskraft und vollkommener Körper verträgt.

Wenn man nun demgegenüber den Gesundtheitszustand in Europa und Nordamerika betrachtet, so muss man leider sagen, dass er nicht gut ist. Wenn dem nicht so wäre, dann würden nicht überall Krankenhaüser, Sanatorien, Pflege und Erholungsheime und degleichen wie Pilze aus der Erde schiessen und nichttäglich neue Medicamente und angebliche Heilmittel auf den Markt geworfen werden. Durch alle diese Sachen wird aber nicht der Kernpunkt berührt, namlich die Lebensführung des einzelnen Menschen und zwar in geistiger, körperlicher und seelischer Hinsicht.

Was das rein Körperliche angeht, so liegt der Hauptschaden wohl darin, dass die Nahrungsmittel denaturiert, chemisiert und sonst verfälscht sind und Leben kann schliesslich nur von lebender Nahrung kommen, die wie bei den Hunzas unverfälscht genossen wird.

Wir haben nun in verschiedenen Ländern Reformbestrebungen, die auf eine naturgemässe Lebensweise hinzielen und es sind auch schon einige Ergebnisse zu verzeichnen insofern, dass ein kleiner Kreis von Menschen zur Erkenntniss gekommen ist, dass unser Leben falsch ist, und sich nun bemüht, durch vernünftiges Leben gesund zu werden. Was nützt alles Aüsserliche, wenn der Mensch nicht 100% gesund ist und sein Leben vollenden kann. Wir haben hierfür zwei gute Sätze: Kein Reichtum o Mensch ist grösser als Gesundtheit und Was nützet Dir der Erde Geld, kein kranker Mensch geniesst die Welt.

Giebt es nun auch in Indien ähnliche Reformbestrebungen und regt das Beispiel der Hunzas auch andere Volkstamme zur Nacheiferung an. Ist der Gesundtheitszustand in Indien wohl besser als in Europa. An und für sich müsste dies der Fall sein, da durch das bevorzugte Klima sich die Bevölkerung doch leicht richtig ernähren und leben kann.

Meine Fragen rühren daher, weil es für uns sehr schwer ist, sich ein rechtes Bild vom heutigen Indien zu machen da wir im aligemeinen Indien nur durch die englische Brille zu sehen bekommen und andere Europäer, selbst solche die jahrelang in Indien gelebt haben, nur die Oberfläche Indiens berührt haben und nichtviel mehr als ihren Klub kennen. Um so erfreulicher war es für uns, durch Frl. Frundt etwas naheres zu hören und zu sehen, mit welcher Liebe sie versucht hat Indien kennen zu lernen. Ueber die Vergangenheit Indiens können wir uns schon unterrichten, da wir gute Uebersetzungen der Bhagavad-Gita der Veden u.s.w. haben.

Lamotte

[I can further elaborate on my letter of 12.6.39, written to Fräulein Frundt, which has reached you. McCarrisson wrote about the Hunzas: 'The only food of these people, to this day, consists of cereals, vegetables and fruit with a certain amount of milk, butter and goat flesh on festival days. The amount of food is generally so scarce that they as a rule cannot keep dogs. Apart from these cereals—barley, wheat and maize—ample harvest of apricots are gathered. They are dried in the sun and used generously in their diet. These people have an extraordinarily long life span. If one takes into account the severity of the winters in this part of the Himalayas and that their houses and protective furnishing equipment are primitive, it sugests that the forced limitations and the unadulterated food seem to go well with a longer life span of extraordinary vitality and perfect body.

If against this, one views the health conditions in Europe and North America, one must unfortunately agree, that they are not so good. If the situation was not so bad, then there would be no hospitals, sanatoria, nursing homes and recovery homes which sprout like mushrooms or new medicines and other remedies which are daily thrown into the market. All these things fail to touch upon the main point, that is, the lifestyle of each man and that too in a spiritual physical and mental perspective.

The main damage, as far as the purely physical aspect is concerned, is caused by the unnatural, chemically polluted and adulterated food. Life can only come from natural food, like that enjoyed by the Hunzas.

In different countries reforms are underway, aimed at achieving a natural lifestyle. And some results already indicate that a small circle of people have arrived at the conclusion that our life is false and are now striving through a resonable life[style] to become healthy. What is the use of a superficial life, if a man is not 100 per cent healthy and his life can come to an end. We have here two adages. No wealth is greater than health and what use is the earthy wealth [when] no ill man can enjoy the world.

Are there similar reforms underway in India too? Does the example of the Hunzas prompt other tribes to emulate them? Are the health conditions in India generally better than those of Europe? This must be the case as the population in this preferred [suitable] climate can through correct nutrition live better.

My questions arise because it is very difficult for us to get an accurate picture of contemporary India, as we generally see India through British eyes or that of other Europeans, who have lived in India for some years but even their pictures remain superficial as they do not know more than what their clubs allow them. We were happy to hear and see through Fräulein Frundt a closer picture and to hear with what love you have strived to learn and understand India. We have been able to teach ourselves about India's past as we have good translations of the Bhagvad Gita and the Vedas.

Lamotte]

[translated by Amol Kahlon]

In the first place, I can furnish no additional information about the Hunzas. The region is isolated, and the nearest friends I could locate could, at the most, reach some portions of Ladakh. I do not know any anthropologist who has made a particular study of the health statistics of the tribe. My own information, therefore, would also come from such reports as that of MacCarrison and Lorimer's book, *Language Hunting on the Karakorum*. However, even admitting the absence of vital statistics, such as infant mortality, and with the agreement that the tribe in question is exceptionally healthy, I believe that my comments upon Herr Lamotte's letter might be of some use.

First, the Hunzas might possess a pre-Aryan language, but this says nothing about their race. Let me point out the Brahui-speaking people in Afghanistan, surrounded by Aryan linguistic groups. Brahui is undoubtedly Dravidian, but the people have physically nothing in common with the Dravidians of South India. The latest analyses claim to have proved what was an old contention: that the Gond language (and perhaps those of some of our other primitive tribes) belongs to the Finno-Ugrian group. But it would be laughable to think of those dark, slim and physically underdeveloped savages as of the same stock as the Finns and the Basques. To take an instance outside of India, the American Red Indians are considered as belonging to a Mongoloid stock, and even the language is definitely Mongoloid in origin, in so far as spoken words can be grouped (a considerable proportion of the words are usually replaced by signs of the hand in actual talk). But there is still an essential difference in the racial stock, because the Hirszfeld blood tests show that the pure Amerind stock lacks all blood genes except *O*, whereas the 'Mongols' including Chinese have a remarkably high and characteristic concentration of the gene *B*. So, I conclude that the Aryan invasion can hardly have anything to do with the incidence of disease in the West, or the health of such out-of-the-way people as the Hunzas.

The second point is the diet. You are surely aware that most of us in India do not drink alcoholic liquors, have few habitual drugs of any sort to aid us, and are vegetarians. I assure you from my experience during the period that I spent doing health work in the villages, that the vast majority of our Indian peasants have even less to eat than the Hunzas do. But they are decidedly less healthy. This, of course, has a great deal to do with the climate also. In our part of the country malaria is endemic, and there are other diseases such as the bubonic plague, cholera, typhoid, which each of us has seen at close range, but which can be studied in countries like Germany only as laboratory phenomena. Most of these, of course, could hardly exist in a cold climate and at high altitude, in a thinly populated country. To this extent, Herr Lamotte's conclusion is valid, that a civilized mode of life is less healthy than that of the Hunzas. But this is often due to the exploitation, hard work, poor diet, accommodation and mental strain, that a great portion of the working class population has to undergo in every civilized country that I have seen.

The next point would be more remarkable: why are the Hunzas more healthy than those, who live in similar surroundings in other parts of the world: the Alps, or Tibet, or the Andes? This, again, I take as an assumption, because I don't believe that the necessary statistical data of a really thorough and reliable character are to be had. But on the basis of that assumption, my explanation would be somewhat different, in all probability, from that of Herr Lamotte. I would take climate and diet into consideration but stress selection, heredity, and isolation. By heredity, I do not mean descent from Aryans and non-Aryans. For all I know, the Hunzas of today might be racially entirely distinct from the people that lived there a thousand years ago. In Goa, in my own village, I can assure you that the region which is now teeming with people (population over 100 per sq. kilometre) had hardly anyone living in it a hundred years ago; malaria and some unknown epidemic having killed and driven off all the inhabitants. In such a place it would be difficult to determine who is descended from whom over a range of centuries. In the Karakorum, a similar situation will probably not prevail, but, in my opinion, the rigorous climate will automatically act as a Darwinian selective agency, and kill off all the unfit at some time.

By heredity, then, I mean that the living members of the tribe as constituted at present must have all descended by inbreeding from very few ancestors, and must have inherited an exceptionally favourable germplasm and a high survival-value factor. The absence of contact with the outside world helps here, in that no bad hereditary traits would be imported. The inbreeding would develop recessive lethal genes to the utmost, killing off by cooperation of the environment all the least fit.

The isolation factor acts in a slightly different way. No major epidemic can have been imported because of this. The populations to compare with our tribe in question would be those of, say, Tristão da Cunha, or Spitsbergen. In the latter case at least, you will find that the people are quite healthy till a ship calls. Then, the entire population suffers from colds, from which they are immune for the rest of the time. *Now isolation itself would not have a favourable effect unless the total population isolated were small.* This we find also in the two other places mentioned. For this, you can receive a theoretical grounding from the bio-mathematical studies of Volterra [*Leçons sur la Lutte pour la Vie*], Lotka and others. If a disease of a chronic character enters a small isolated population, the result would be that the whole lot would more or less take it, and all eventually recover from it or those not immune would be wiped out. A succession of such attacks would either kill off the whole population, or leave only those immune. This, I take it, is what has happened in that remote corner of the Karakorum. For a larger population, the facts are not so simple. The disease will rarely run its full course over the whole population at once. It will exterminate, or be driven off from, a small section at the most. As a result there is usually a perpetual cyclic course, during which there is some portion of the population always acting as a carrier for the epidemic. This cannot happen for a small community like the three hundred people of Tristão da Cunha island. Please understand that population is a technical term where disease is concerned, and includes all carriers. For example, the bubonic plague 'population' would include all rats as well as all human beings capable of being infected, along with the intermediate carrier, the fleas. In the Himalayas we know that intermediate parasitic carriers are rare. In many places, the water supply is of an exceptional purity, and for the tribe in question, there may even be some favourable mineral content.

Hunza isolation, however, was not absolute, as is seen from the records of Chinese and other conquests, of penetration by Buddhist and Mohammedan missionaries, and traders. The harsh climate, therefore, operated jointly with a mild but comparatively steady exposure to infection. Both of these selective agencies were lacking in the South Sea islands, which had only isolation and a healthy natural diet; the result was a beautiful and vigorous race that perished at its first contact with the diseases and vices of the white man.

Civilization by itself need not be a hindrance. Civilized communities, if based upon the ideal of service rather than of profit, command all the chemical, mechanical, and scientific means for producing a healthier population on a larger scale than that of the Hunzas. Many countries possess, even at present, the necessary means for producing enough sustenance for all members of their population; to produce the necessary comfortable living conditions. Perhaps geneticists could select, by proper scientific tests, people of such inheritable physical qualities as to breed a race better than the Hunzas. But, all these countries are, if anything, going the wrong way. The general index of consumers' production and means of livelihood available for the average citizen are usually going down, most of the spare national energy being absorbed by armaments.

The cultural factor is probably not hereditary. I do not know of any important contribution to civilizations, as such, made either by the Hunzas or any other long lived race.

As for reforms in the country improving the condition of the people the outlook is decidedly poor. Our politicians have tried to enforce prohibition, but mostly of the country wine that has a high vitamin B content; the sole amelioration here is due to economic and not to dietetic factors. Salt, a necessity of life in our hot climate is still heavily taxed. McCarrisson was occupied with experiments on diet, which might explain his views on immunity among the Hunzas. But his successor in the institute at Coonoor, finding that handpolished rice had a higher vitamin content than that husked by machine, could only recommend that the rice polishing mills be forbidden for the good of the population. That the population hadn't enough to eat, and that the time saved from the labour of dealing with the cereal by hand might enable them to earn a little more never struck him. There isn't the slightest doubt that the general Indian diet is deficient in vitamins, but for the average Indian, the most serious deficiency is that of bulk and nourishment as such.

The hospitals, sanatoria, etc., that Herr Lamotte regrets in Europe are a rare phenomenon in India, being at best a middle class service. But unless one is cold-blooded enough to take death and illness as just curious aspects of life and health, the result of the lack of medical facilities cannot be called happy. In one matter and only in one can we be said to have gained something, and that is the ability to survive under the most wretched conditions. Undoubtedly, this ability is also shared by the poor Chinese coolie. Examples are easy to produce. The state of Florida in the U.S.A. had all its cattle wiped out by cattle tick fever, and the ticks persisted even when all the game was shot off in a desperate attempt to eliminate the parasites. The solution was the import of ordinary Indian cattle (called Brahma or Brahmin cattle in the U.S.A.) which throve under conditions that did not permit any other cattle to survive. There was a pea blight in the Midwest of the U.S.A. which affected all peas except some very miserable shrivelled Indian specimens. With interbreeding, the seed dealers were able to cross the disease resistant qualities of India peas with the superior meat content of other varieties, producing satisfactory seeds within half a dozen pea generations. Both of these cases have occurred within the last ten years. At Benares and other holy places we still have the ancient custom of dedicating an ordinary bull-calf to Śiva: the calf is branded, and released to wander where it will, to eat in any field without punishment. The result is invariably a superb breed bull, one which would take a prize at an ordinary cattle show. On the other hand, attempts to improve Indian stock by importing cattle from other countries have failed. The conclusion is that under Indian conditions, the plants, the animals, and presumably even the human beings, are doing as well as possible. The only way of improving their physical characteristics is, therefore, to improve the conditions. So far as I can see, there is no chance of any such permanent improvement, without socializing the means of production.

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Caste and Class in India*

Under this title, Paul Rosas (*Science & Society*, 1943, vii [1943], No. 2, pp. 141–67) attempts to give a description and an explanation of the extraordinary social phenomenon that passes under the name of caste in India. Both 'facts' and interpretation are open to objection, so that a few remarks upon them may be of use for clarification.

Almost every statement of a general nature made by anyone about Indian castes may be contradicted. The Brahmins are not to eat meat nor any food derived from the taking of life. But Vedic Brahmins ate beef, Kashmiri Brahmins do eat meat, those in Bengal fish, without losing caste. The Sarasvats in Goa eat fish regularly and venison on occasion, but touching an egg or a chicken would be an incredible performance for any of them. Again, the *sudra*, lowest of all castes, has no access to temples or to book learning under the traditional system. We may ignore the developing and semi-anglicized city schools here, but even in otherwise very conservative villages, I have seen *sudra* teachers instructing Brahmin boys in book-learning; in the most surprising case, the teacher was autodidact, and taught even Sanskrit, the traditional sacred language preserved only for the upper castes, to sons of Brahmins, and in the precincts of the temple. Caste is supposed to exist only for the Hindus, but here class phenomena cut across the religious barrier. There are good Roman Catholics in Goa who regard themselves as *Brahmin* Christians, and remember their family before forcible conversion some four centuries ago; they will prefer to take drinking water or food from a Hindu Brahmin, but not from a '*Śūdra* Christian.' The point here is that these Brahmin Christians and the Hindu Brahmins with whom they deal on such curious terms are both members of the landowning class by long and conservative tradition.

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Seeing the great diversity of features, it will be necessary to take a large view of the caste institution as such. But the view that Rosas gives, identifying the four-caste division with a class division and the general castes with tribal divisions is nevertheless too large, obliterates too many details to be useful. There are and always have been princelings, even kings, who belonged to castes other than the Ksatriya, which should traditionally be the warrior or the ruling caste. The fact is, however, that any ruler or even an invader (like the Scythian Rajputs) who will extend his patronage to the Brahmins and give at least nominal adherence to the tenets of some kind of Hinduism will be given the honors of a *ksatriya*, though his poor relatives in some distant village may be shepherds without much status. The inclusion of tribal and traditional organizations within the fold of caste gives the institution its power in social organization and is a development of the original four-caste system to fit newer conditions. Finally, it is not necessarily true that caste will disappear with modern means of production any more than the feudal ideology disappeared from Japanese society with modern machinery. Caste has already exercised, in India, the function of medieval trade-guilds, in that the leather workers, some kinds of tailors, masons, etc., form in most Hindu localities, distinct castes by themselves. Communal differences are already proving very convenient in matters of factory management. Where the unions are troublesome, the usual custom on the part of the clever factory owner is to recruit people of as many different religions and castes as possible, to prevent their union. With increasing production, this has become a force tending to wipe out caste. But if the productive forces cannot find an outlet, caste could be made an excuse for economic victimization, as with the Jews in Germany. Some such thing has already happened with the untouchable in the extreme south. Not only that, we can discern the economic driving force behind most of the great theological upheavals in India. Within the framework of caste and of Hinduism, one has only to see the bitter quarrels between the *smarta* and *vaisnava* Brahmins, most of whom cannot explain the extraordinarily subtle philosophic differences between the teachings of their founders, but when one sect displaced another, one has only to look a little closer into such historical records as are available, and it will usually be clear that there was also a change in the ownership of the land.

In fact, this brings us to the main objection to Rosas's treatment of the subject: the total absence of all historical perspective. There is a very profound reason for this lack, because *the caste system is designed to preserve Indian society in a static mould*. Its principal function *now* is the *negation of history*, and therewith the negation of progress. For example, over large parts of the country, and side by side with very ancient observances is the festival of *satyanarayana*, the 'true Narayana'. As far as can be ascertained, this has absolutely no sanction in scripture, being adopted from the mid-nineteenth century cult of a Mohammedan *pir* called Satya. But if necessary, someone, a needy Brahmin of some sort, would have arisen to write a whole book on the subject, giving the necessary sanction. It is as if a book had been written into the Bible enjoining the worship of Allah, but to the true Brahminical mind, there is nothing out of the way in such a performance, combined with all the ritual of an exaggerated conservatism. This also is a feature of the system. The Hinduism we have today is not the Hinduism of the Vedas, nor of the original Aryans whoever they were. The modern Hinduism, and therewith the modern caste, have not only survived in inroads of Islam and of Christianity (from the days of St. Thomas and Nestorius) but are themselves entirely transformed by a religion that prevailed almost universally in India for centuries, that is, Buddhism.

The rise of Buddhism has a date and a locality: Magadha (modern Biḥar) in the sixth century BC. A great deal is said about the new philosophy; Buddhist non-killing or non-violence, *ahimsa*, is now an integral part of Hinduism, and has been sharpened to a political tool on a class as well as a nationalistic basis by Mahatma Gandhi. It was originally borrowed from Jainism, a much older religion. The questions that no one troubles to answer are: why did Buddhism start where it did? Why did it spread so rapidly? And why did it die out? The reasons, naturally, are not to be found in the philosophy of the day but in the productive relations, in the historical tendencies of the period. Buddhism spread far beyond Indian frontiers, to China, Japan, Asiaminor. It is the ruling force of reaction in Tibet and even Mongolia to this day. Rosas, however, fails to consider why Buddhism managed to cross the geographical isolation of India whereas the caste system, according to him, was effectively prevented by those same barriers from spreading outside the country.

Caste in the days of the Buddha was, probably, quite near to the class system that Rosas ascribes to the *jati*. But its stronghold was nearer the Indus valley than to Magadha, and it was extremely rigid and conservative. It was bound inseparably to the old trade channel to the west, through Iran, along the route explored by Stein and followed by Alexander's army. This system did not allow for expansion, and it did not permit unification. On the contrary, it opposed unity in the political and economic sense. The Brahmin, always the kingpin of the caste system, was then purely the *sacrificial* priest, and his main source of livelihood seems to have been the fee at the sacrifice. The purpose of the sacrifice was propitiation of the gods, and naturally, the grandest sacrificial ceremonies would be for success in war. The priests gained a great deal from the constant warfare of petty princelings in the days of Buddha. That at least is the picture we get from the stories associated with the oldest Buddhistic canonical literature. As there was no payment to the farmer for the sacrificial animals, and as robbers grew in number between populated cities, both the peasant and the trader suffered. There must have been pre-Buddhistic protest, for which Jainism was too passive because of its extreme form of *ahimsa* to be of general use. We can trace other forms from the literary tradition that called Magadhan Brahmins *brahmabandhu*, a term of contempt. Buddhist *ahimsa* is practical, directed not against meat-eating as such but against the costly royal sacrifices. Buddhism did not touch the older ritual, nor set up a new one of its own, it worked out a new social scheme which would make people more civilized, make it possible for them to coexist with less friction. Problems such as the existence of a soul were simply and deliberately left aside as of no moment. Nevertheless, this system spread not because of its greater attractiveness, but because it gave the necessary impetus to (or was the expression of) the craving for a strong, centralized monarchy that would stop the constant, petty warfare and make trade routes safe. The person who took the first step in this direction was not Buddha's royal pupil Bimbisara, but his parricide son Ajatasattu. One of his most difficult victories was the elimination of an oligarchic democracy not far removed from parallel contemporary states in Greece, namely the tribal government of the Licchavis or Vajjis. This was highly praised by the Buddha for the humanity and goodness of their institutions, and it retained a traditional glory for a thousand years, so that the first Gupta king was proud to claim a 'Licchavi princess' as his mother, while forgetting to mention his father in the inscriptions. So, Buddhism is not altogether the victory of good over evil that it has usually been considered to be. It is remarkable that it is a *proselyting* religion as Hinduism was not, and that the principal function of its monks was originally to spread the doctrine. We hear of monks, even in the time of the Buddha, going half way down the peninsula, and not towards the Indus, though the religion as such had not spread beyond the Gangetic basin at the time of his death, and the total number of monks could not have been more than five hundred. Reading the older Pali Buddhist canon, one is struck by the fact that though the Buddha was from an old and proud, though somewhat decayed Ksatriya family, his most ardent lay followers seem to have been merchants, traders, men of wealth—a class that is absolutely silent in Indian history as we have received it from records and inscriptions. Now, was it purely a negligible accident that Buddhism spreads with the Mauryan empire, without becoming its official religion till the empire is consolidated by the last conquest of Aśoka? Was it also a coincidence that though a culture rich in natural wealth is known in the peninsula proper in supposed 'prehistoric' times, the first coins found there (with the possible exception of a few harbours on the western coast) are certainly Mauryan? The first armies to overrun south India, as far as the modern state of Mysore (Karnataka), were those of Asoka's grandfather Candragupta, who was not a Buddhist, but is supposed to have died in the other non-violent religion, Jainism. That is, Buddhist non-violence did not interfere with great wars in India, any more than it did with those of the Buddhist Jenghis Khan, but it did help stop the petty ones, and it was, in a way the older caste system could not have been, an influence making for unity. Still more important, it opened up the Indian peninsula, till then a terra incognita.

If so, why did caste come back in a changed form? Partly because of the ritual, which was exclusively the possession of Brahmins. Partly because the salient features of Buddhism had been absorbed by Brahminism, which went so far as to admit Buddha as an incarnation of Vishnu. But mainly because it was uneconomic, because its historical usefulness was exhausted in India, though not in the other countries to which it had spread. That is, the larger monasteries held too much land, which was appropriated by kings like Sasanka under the Brahminical reformation. The Buddhist monk had no longer to beg for his livelihood or to preach to the people, who had all been converted; the one who ministered to the spiritual needs of the people was now the village priest, always a Brahmin, who might not know much philosophy, but who could as always officiate at all ceremonies, bless the crops, and so combine the functions of priest and medicine-man in general. After the Mauryan conquest, local influence became strong again, separate provincial kingdoms again coming into existence and fighting for power, though on a very much larger scale than in Magadha of the sixth century BC. So, the Brahminical methods have again their needs, kings again celebrate huge sacrifices for victory in battle, though these do not cause the loss they used to as the number of kings, or at least their density is less. And foreign invasions are no longer resisted with the opposition that stopped Alexander, and defeated Seleucus. Nevertheless, what resistance there is comes from those following the Brahminical and not the Buddhistic philosophy. The monk could afford to stay in his monastery and ignore the fighting, whereas the Brahmin had a family, and in general closer ties with the people.

We can get a rather faint glimpse of the four-caste system in its most remote (pre-Buddhistic) origins, and it is, as far as can be seen, pre-Aryan, probably associated with the ancient civilization of Mohenjo-Daro and the Indus valley, and with destruction in or about the second millennium BC by the Aryans. It may reasonably be conjectured that the conquering warriors swept a civilization which had accurate weights and good cities, but no weapons to speak of. After years, probably centuries, of a fearfully hungry existence in the forests, one clan of the conquered becomes the priest-caste of the conquerors: the Bhargava Brahmins. The conquerors become the Ksatriya caste, being warriors. The traders are present from older times, and the rest of the population sinks to a regularized slavery but without large-scale trading in human beings as in the west, being the Śudra caste. The prohibition against a Śudra learning the trade of weapons and against his education in the Sanskrit language, therefore, is a precautionary or a police measure against helots. This system, crude as it sounds, was still a powerful advance over what existed before: helpless cities and almost savage barbarians who sacked them. It is this system that enabled other regions to be opened up, that allowed a more vigorous if less decorative civilization to advance into the interior of India. Its flexibility, its post-Buddhistic development into a method for maintaining the status of any rule that made nominal concessions to Hinduism, enabled it to survive great changes. These changes, it did its best to deny altogether by absorption (when compelled to absorb the changes) and by promotion to an indefinite antiquity. After the Vedas, it is very difficult to find any Indian text that is generally known and is nevertheless fixed with certainty. This 'fluidity' that torments any scholar who looks into Indian manuscripts is a social feature of the country. The change-over from Buddhism also laid the foundations of later communal and religious quarrels in some provinces. The Muslims in Bengal, for example, are mostly converted from the Buddhist peasants, who were the poorest and the most oppressed class for centuries.

With the development of the country as a whole, and the foundation of its economy on the village unit with the family as a sub-unit, the progressive function of caste may be said to have ended, so that caste itself must thereafter attempt to be static. But the fundamental need of the country, food, could not be regularly satisfied by a static system. As no real productive changes occurred until the advent of European 'civilization', (though *usines* without machine power had developed by the seventeenth century), which followed the Buddhistic pattern in sending its missionaries, traders, and armies, the sole method of amelioration was to dull the pain of living. Thus it is that so much of Indian philosophy and literature, which went on developing, had to follow the religious path. This 'opium of the people' was needed if life were to be worth living. Even today, the Indian peasant woman, who has to work in the fields and cannot tend the infant she has borne, drugs it with ordinary opium to prevent its crying from illness or hunger. Without thinking of the consequences of their action, our philosophers followed this pattern which will have to be discarded when the productive system of the country reaches a stage of maturity.

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Geldner's *Ṛgveda**

This long-awaited translation of the *Ṛgveda* should have appeared twenty years ago, to have saved many a scholar's travail over the years. One volume containing the first four *maṇḍalas* in translation did appear in 1923 being, even by itself, of immense help towards the understanding of the oldest Veda. The history of this publication is long, involved, not always pleasant nor edifying. The translator, the first editor, as well as the whole academic tradition in which they grew up, have passed away in the interval between Geldner's translation and its printing. Even so, the work is not really complete. It was promised in the foreword to the first volume that the third and concluding volume would contain a retrospective introduction to the *Ṛgveda*, with a set of indexes for words, names, etc. This has yet to appear, presumably in another volume. The helpless reader can only hope that the wars, revolutions, economic crises and other upheavals of the contemporary world will not further delay the publication of this indispensable guide.

The work has been attractively printed. Geldner's successor J. Nobel is to be congratulated for supervision in press after the death of Geldner. No attention in this respect could be excessive, for this translation, without any doubt, is the best in existence in any language. The older German translations of Ludwig and Grassmann, besides being long out of print, are unsatisfactory. The former is often inconsistent, though a meritorious effort for its time and place. Grassmann's is better in many ways, as he had made a complete word-index of the whole *Ṛgveda*. Nevertheless, his insistence upon reproducing the Vedic metres meant use of German archaisms, shifting of emphasis, and at times serious change of meaning. Many passages, whether individual ṛks or entire hymns were summarily relegated to the appendix because Grassmann considered them late; thus reading the whole of any really interesting hymn in that translation means a search over a considerable number of pages. Then there are some deliberate mistranslations, such as Büffel for *uṣṭra*. In English we have the rendering of Griffith and another by Wilson, neither of which can be relied upon in the really obscure passages with which the *Ṛgveda* bristles; without an accurate or at least convincing interpretation of these passages, a great deal of India's past will remain hidden.

**Journal of Oriental Research*, Madras, vol. 19 (1949–50), pp. 290–5.

A Review-article on *Der Ṛig-Veda aus dem Sanskrit ins Deutsche übersetzt und mit einem laufenden Kommentar versehen*, von Karl Friedrich Geldner. Harvard Oriental Series vols 33, 34, 35; Cambridge (Mass.), 1951.

Geldner generally does not gloss over any of the difficulties. His profound study (a great deal of which had been demonstrated in the *Vedische Studien* in collaboration with Pischel) along with mastery of all that had been published by his predecessors enabled him to point out the parallels between any given phrase and several others. His footnotes, the 'running commentary' of the title-page, are in many ways the most valuable aid towards the study of the book, which necessarily means comparative study. The *Ṛgveda* is without any doubt a very difficult text; to grasp its meaning unaided is virtually impossible. The best-known aid, the commentary of Sāyaṇa, so persistently interprets in the light of Śaṅkara's doctrine that it is a poor guide for drawing any material, historical conclusions from the document. Yet Geldner was careful enough not to discard Sāyaṇa altogether, deriving many useful interpretations from the great Indian commentator; these had been missed or scorned by other western scholars, less careful or less meticulous than Geldner, who was one of the last (but for Lüders) to work in the great German tradition.

When all this is said, we come to the salient fact which no reviewer can ignore. The thirty years that have passed since Geldner's translation was first ready for the press have been full of discoveries that materially affect *Ṛgvedic* studies, though not in the direct line. These have been in the field of anthropology, and even more archaeology. To Sāyaṇa, the Veda was a mysteriously worded document for spiritual guidance. For Geldner, the Vedic puzzles were purely a philologist's affair, problems to be solved by word-interpretation, though on the human level. Today we go much further studying ritual and sacrifice in other cultures; we ask ourselves a new but absolutely fundamental question: what is the relationship of the various *Ṛgvedic* people to the extinct civilization of the Indus valley cities, which had a greatness comparable to the Mesopotamian. Were not the *Ṛgvedic* Aryans just the people who destroyed this great civilization? But if so, is the conquered people represented by *dāsa* or *paṇi* in the Veda? Harappa is obviously the Hariyūpīya of *RV*. vi, 27.5, presumably Sanskritized from some pre-Aryan name. But what then is the city Nārmiṇī of i.149.3, lighted up by Agni, which might mean burned down. Vaśa Aśvya says in viii.46.32 *śataṁ dāse Balbūthe vipras Tarukṣa ā dade*. The locative is a very difficult usage here, but Grassmann takes Balbūtha and Tarukṣa as two separate king-names, while Geldner has passed the ṛk by without comment, translating 'Hundert bekam ich, der Redekundige, bei dem dāsa Balbūtha Tarukṣa'. The point in either case is that a Brahmin of the Bharadvāja gotra served, and received gifts from, one *dāsa* king, or two. What happens to the caste system in that case, and the origins of Brahminism? It is clear from viii.102.19–21 that some Brahmins would pray for release from abject poverty; there the indigent seer humbly prays Agni to accept the sacrifice of wormeaten firewood, as he has no cow, not even an axe. Yet Geldner ascribes iv.18.13 to Indra, making the dread god proclaim that at one time he cooked a dog's entrails from need, found none among the gods to take compassion on him, and beheld his own wife in degradation. This is quite preposterous. On the other hand, the Brahmin tradition is uniform, whether in the Manusmṛti (10.106) or Sāyaṇa, that the speaker is the seer Vāmadeva, who suffered this extreme poverty; the verse is thus a *dāna-stuti* of Indra. The answer to such questions is closely bound up with the axioms, the tacit or explicit hypotheses which one makes as to the origin of the *Ṛgveda*, and its main function at that period when the text was fixed. If it be admitted—as seems beyond the possibility of doubt to the present reviewer—that the function was liturgical, that the sacrifice as ritual (not as philosophical symbolism) was essential while the hymns were chanted as accompaniment, it then follows that the mysterious *RV*. x.95 (Urvaśī and Purūravas) cannot be labelled a ballad as Geldner has done, that some deeper significance attaches thereto.

To illustrate how this affects the translation now being considered, take the word *ibhya*, which occurs just once in the book, where Agni eats up the woods like a king the *ibhyas*: *RV*. 1.65.7 *ibhyān na rājā vanāni atti*. This is translated following Sāyaṇa, as 'wie der König die Reichen, frisst er die Hölzer auf'; in the note, Oder, wie ein König seine Vassallen. This means that the *ibhya* is a rich man, one who possesses elephants. Now *ibhya* is again found in the Chāndogya Upaniṣad 1.10.1.2, where the famished priest Uṣasti Cākrāyaṇa passes a night in an *ibhya-grāma*, refreshing himself with some leavings of *kulmāṣa*-broth given by an *ibhya*. Śaṅkara's commentary again takes *ibhya* as rich, *īśvara*, one who owns elephants; in this sense the translators Deussen and Hume seem to accept it. But this does not make sense, for *kulmāṣa* means wild beans or rotten beans, food of very low quality. The point of the story is that the Brahmin had to accept the poorest food soiled by a person of low caste, in the hour of need. Thus Gopalananda Svami comments on the same passage, taking *ibhya* as elephant driver, which makes real sense. The word is again found in Aśoka's fifth rock edict, clearly as antithetical to brāhmaṇa, hence denoting a person of low caste. Presumably, these were originally tribesmen with the elephant totem, who had been degraded by conquest. It is thus that we find, for example, the Mātaṅgas. A king with vassals who are rich in the sense of possessing elephants but powerless against the king's exactions, surely cannot belong to the *Ṛgvedic* period. Geldner would have been justified in examining the word more closely.

Such examples can be multiplied, and some more have to be given if only to stimulate the reader to think for himself when reading Geldner's generally satisfactory translation. In commenting on 3.4.7, he gives a comprehensive note on the seven sages of legend as exemplified in *Ṛgvedic* citations, and represented in the seven sacrificial priests with different functions. But then why did he not consider whether these were related to the original of the ādityas, the *saptārdhagarbhāḥ* of 1.164.7. Were they not also the seven killed by Indra, who brags of being *saptahā* in x.49.8; in viii.96.16 Indra is from birth the enemy of 'the seven' who had had no enemy. Why are these not to be identified with the other seven beginning as enemies and finally surviving as 'priests' of the Aryans. With this assumption goes a complete theory of *Ṛgvedic* development.

Both Grassmann and Geldner take x.108 as the demand by Saramā for return of cattle *stolen* by the Paṇis. Actually, it is very clear from the hymn that Saramā bluntly demands the cattle but there is not one word in the hymn itself of their having been stolen or Indra's having any title to them. The story belongs to the later period when Indra had become established as the undisputed chief god, his enemies the Paṇis as thiefs; on the other hand, the hymn derives from an earlier period when the aggressive demand for wealth, uttered in so many words, had come down to a ritual, somewhat like the *sīmollaṅghana* and 'looting of gold' at Dasarā commemorating the fortunately brief period of Marāṭhā robbery.

Nevertheless, Geldner brings the *Ṛgveda* within the reach of all of us, and makes a really critical study possible for the first time. As such, this translation is to be welcomed by all interested in Indic studies, whether for their own sake or in the comparative field. Even more welcome is the resurgence, under the editorship of Prof. D.H.H. Ingalls, of the Harvard Oriental Series which had so long been dormant.

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Marxism and Ancient Indian Culture*

India from Primitive Communism to Slavery by S.A. Dange; People's Publishing House, Bombay 1949; pp. xix + 181, Rs 4–8–0.

This painfully disappointing book by one of the founders of the Communist Party of India would not have been worth reviewing, but for the fact that to let such a performance go unchallenged would bring Marxism into disrepute. The author's distinguished services to India's proletariat and his being in jail both when the book was drafted and when it was published do not condone the fundamental errors of fact and of reasoning that fill the book from cover to cover with endless confusion. The present review is meant to be constructive.

Marx and Engels made it a point to acquaint themselves with every new discovery of note in science. If they gave such great publicity to Morgan, it was not because they had read nothing else, but because Morgan's theory explained so much that had remained obscure and disconnected. If we look upon Dange's models (besides Engels) we find a striking emphasis upon a narrow section of the emergent Indian bourgeoisie. He follows in actual fact the worthless conjectures made by Tilak, Rajwade, Kunte, *after* criticizing the Indian bourgeois intelligentsia in a needlessly prolix introduction. These are his 'Vedic scholars', though he might have found some real scholars like Velankar, even among Maharastrians. No matter what information about another branch of the Aryans could have been gathered from Avestan sources, Dange cites only one, the Vendidad, and then at second or third hand from Tilak's miserable *Arctic Home in the Vedas* (p. 82). The same work may have inspired the irrelevant reference to the usefulness of fire in long Siberian winter nights (p. 38) unless

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we are to understand that the Vedic Aryans were in the habit of retiring to Siberia for the night. Dange seems not to have realized how thoroughly this particular bourgeois influence saturates his own thinking. The outstanding characteristic of a backward bourgeoisie, the desire to profit without labour or grasp of technique, is reflected in the superficial 're-search' so common in India; it would be pathetic to find it also in the writings of one who has suffered for his belief in Marxism.

In noting, quite correctly, that British histories of India are coloured by the national, and class prejudices of their writers, Dange forgets that most of our source material was first collected, analyzed; arranged by foreign scholars. To them we owe the critical method, the first publication of authoritative texts, and archaeological exploration—digging up the past not with the pen, but with the spade. As for class prejudice, Dange fails lamentably to note that it also colours very deeply the Sanskrit documents which he believes to be the best sources for historical investigation. 'The chief feature of the Hindu system of looking at history, or in fact the whole universe, is that it considers history as being not static but always-moving and changing' (p. 34). But the four *yuga* names which he offers in evidence mean throws of dice and not ages of mankind in the earliest sources. The chief feature of the supposedly dynamic 'Hindu' treatment of history is the obliteration of all historical content; otherwise we should not have to glean conjectures so painfully from a mass of contradictory legends which alone survive the 'Hinduization'. What we know of Aśoka and the Guptas comes not from Hindu literary sources but from their own inscriptions—read by Prinsep and Fleet; the Hindus had managed to forget even the script. If Dange finds it worth while mentioning Justice Ranade and N. C. Kelkar (with respect!), could he not have spared a few sentences for European and American orientalists, particularly for the great line of German Indologists from Grassmann to Lüders? They were thinkers who approached Indic studies with insight, understanding, sympathy, critical systematization.

The results of sadly inadequate basic preparation are evident on every page; a detailed criticism would mean rewriting the whole book twice over. It must be pointed out to the author and his friends that incarceration has been made a regular excuse by the new Indian bourgeoisie for foisting much shallow writing upon the Indian public; Jawaharlal Nehru himself heads the list. Misprints and defects of style might be passed over. The mistaking of *gens* as the plural of *gen* (p. 41, 82, 181) is more serious: 'fantast' (p. 33) should refer to a person; levirate (p. 63) 'with other men' is a worse slip, like the identification of 'stonehenge' (p. 45) with an enclosure to protect the whole commune, cattle and all. This planking down of words in any sense or no sense at all becomes progressively worse, and indicates loose thinking: '*Brahman is the commune of Aryan man and yajna is its means of production, the primitive commune with the collective mode of production.*' (p. 40, Dange's Italics). This is so wildly improbable as to plunge into the ridiculous. All *Ṛgvedic* uses of *brahman* can be, and the greater part must be, explained as referring to prayer or the preisthood, while *yajña* is the fire-sacrifice. A ritual cannot be a 'mode of production', though ancient man must have understood magic and ceremonial as helping to increase production. On p. 47 we get an etymology of *yajña* as ya+ja+na = 'They gather together and beget,' which is too silly for comment, apart from the dangerous authoritarian tendency dislosed.

When Engels utilized Morgan's discovery, he was well acquainted with the contemporary store of archaeological and anthropological knowledge, as well as European history from inscriptions and literary sources. In writing on India, Dange is aware that there exists a pre-Aryan population and perhaps that the survivals of matriarchy and tribal society can be found only among the least Aryanized of these. But with an exclusiveness that would have gratified any follower of the late Adolf Hitler, he restricts himself to the Aryans. Again, he is aware that there were Aryans outside India but sees no need to pay them any real attention. For him (as for Tilak, Rajwade and the rest), the Vedas and the *Mahābhārata* suffice to prove almost anything, with a little imagination and false etymology. Even in the *Mahābhārata*, he confines himself almost entirely to the Śāntiparvan, of which no critically edited text is available as yet; and a glance at the properly edited parvans (from which he could have taken much useful material) would have shown him how badly such a critical edition is needed before drawing any conclusions from the epic. There exists a study of the Aryans (again not known to Dange) by a first rate archaeologist, V. Gordon Childe, who developed into a Marxist simply because dialectical materialism explained his evidence better than any other approach. Archaelogy alone can supply any reliable data for the study of ancient cultures, particularly those that have left no contemporary, legible, written records. It is a completely materialistic approach, for it tells more than any other method as yet at our disposal about the tools of production utilized by many sections of mankind in the remote past, historical or prehistoric. Ancient written sources are to be trusted in direct proportion to their concordance with archaeological evidence, which means nothing to Dange. The fully developed kinship terminology of the Aryans shows that they had passed beyond the purely matriarchal stage of social organization *before* they separated for their various migrations. They first appear as a marginal people attacking highly developed civilizations; their chief contribution seems to have been better military organization and a new type of language. In the near and middle east, they displace the rulers of old civilizations without fundamental change in the means of production. In Greece and the eastern Mediterranean, they wreck Minoan and Mycenean cultures, but absorb some important cultural elements, as has been shown so brilliantly by George Thomson in his recent study on the prehistoric Aegean, following up his penetrating analysis in *Aeschylus and Athens*. Of course, Thomson uses the full mechanism of archaeological reports and literary criticism, along with his profound knowledge of Marxism and anthropology. In Egypt, we find the Daniwna (possibly Danaans or Dānavas) depicted among prisoners of war; a dynasty or two later there appear kings of Egypt with names like Shashank which would have a sound familiar to Aryan ears; but there is no change in the organization of Egyptian society. What happened in India? Did the Aryans bring a primitive commune into an empty wilderness?

Dange notes the discovery and excavation of Mohenjo-Daro in Sindh (p. 3) only as a mere curiosity, of no importance for his own study of the Aryans in India. As a matter of fact, it must completely reorient the study and interpretation of Vedic culture, for the fully developed city of such magnitude, with all its high technique and the complex social organization thereby implied, is certainly not Vedic; its demonstrable antiquity does not allow it to be interpreted as post-Vedic. If we wish to study the oldest Indian communities, the fact has to be faced that those of whose antiquity and means of production we have any certain knowledge have passed far beyond the primitive, into civilization. If the study is to be restricted to Aryans, we must at least mention this earlier civilization which the Aryans could break up because they knew, as the Indus valley people did not, the use of the horse and of iron. The Mohenjo-Daro people had trade relations with Mesopotamia, as shown by archaeological finds both in India and abroad; some Aryans also had contact at an early period with Mesopotamian culture or its offshoots and successors. So, we are already well past primitive communism and have to face great complications when attempting to extract history from Vedic liturgy or epic myths. What must be noted—as Dange of course has not—is that the Vedic references to fortified strongholds and cities of the black Dasyus, destroyed by Indra, begin at last to have a meaning. The three-headed Tvāṣṭra of

Vedic tradition cannot be unconntected with the three-headed creatures to be seen on Mohenjo-Daro seals. Our Aryans did not succeed to power without destroying the older civilization, and we must therefore look for the effects of this destruction upon the conquerors as well as the conquered. Even in the older portion of the *Ṛgveda* we hear of warfare between Sudās and the 'ten kings', in part at least a civil war among the Aryans. It does not take long for the non-fighting portion of the victors to be depressed (along with the greater portion of the vanquished) in a newly developed social scale, especially when racial differences are present. Such differences are clearly indicated by the word for caste, *varṇa*, which means colour; for Dange's facile pseudo-Marxist explanation, the *varṇa* is a later development, with division of labour. Did some of the exploited change their skin colour with retrospective effect? As a matter of clearly observable fact, we have some form of the coercive mechanism—the state—visible in the Vedas, which implies some form of class division as well, whether fully crystallized or not. The formation of the Śūdra caste, into which a large portion of the Dasyus were thrust, *prevented* the development of real slavery in India. The word for slave is *dāsa*, in older times equivalent to Dasyu, later to house-servant or bondsman; never to a chattel-slave bought and sold like any animal for heavy labour in the fields or mines. Even Diodorus Siculus notes with approval the (idealized) slaveless Indian society. From the Greek point of view this was quite correct as was, from the Indian, Buddha's remark (Assalāyana-sutta of the Majjhimanikāya) that in Yona, Kamboja, and countries beyond the frontier there were only two castes: Ārya (= free) and Dāsa (slave), of which the Aryan could become Dāsa and conversely. *Because of the caste system, India had helotage, not slavery*. Thus Dange's very title is wrong, for his sources contain neither primitive communism nor slavery. Of course, he makes no attempt to explain why caste should be a feature of the Indian Aryans alone, not of any others. For him, it suffices to read the class war into the *Bhagavad-gītā*.

All this is not to say that Marxism does not apply to the study of ancient Indian culture. It can be most effective if properly utilized. Matriarchy did exist, though not among the Aryans at a time it would suit Dange to have it; the time element means very little in his book, chronology being immaterial for him. We know a good deal about the actual working of Indo-Aryan tribes, in particular the Vajji or Licchavi group; but not from the Vedas and not at an early stage. These oligarchs, whose name at least continued for a thousand years with honour, are extra-Vedic *vrātyas*, which shows that Dange's source material is as defective as his analysis.

But he is so anxious to identify the general stages set out by Engels that one can find atrocious mis-statements on almost every page. 'The *Ṛigveda* mentions a big feud between the Deva-*Gaṇas* and the Paṇis. The latter had stolen the cattle herds of the Deva-*Gaṇas*, whose leader in this war was a woman Sharama. She leads the Devas through rivers and forests and finds the Paṇis, and war ensues' (p. 87). The reference is presumably to *Ṛgveda* x.108. The (not particularly old) hymn merely reports a dialogue between the Paṇis and Saramā (not Sharama), who claims to be nothing more than the messenger of Indra demanding the return of the cows; there is no mention of the 'Deva-gaṇa', and the *devas* are themselves not on the scene at all. Traditional comment makes Saramā a (divine) bitch sent by Indra to track down the missing cattle, and in fact *sārameya* means hunting-dog. Nothing is said of a female or any other leader of the *devas* in war or peace, except Indra and possibly Bṛhaspati. The most charitable interpretation that I can place upon this sort of 'historical' writing is that Dange has not troubled to read his own sources.

Marxism is not a substitute for thinking, but a tool of analysis which must be used, with a certain minimum of skill and understanding, upon the proper material. Interlarding groundless conjectures with quotations from Engels does not suffice. For the book under consideration, the poor documentation, habit of passing off secondary references unverified (and unverifiable), poor grasp of the material, and absence of logic in interpretation make it impossible to rely upon any of the author's statements as regards the history of India.

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What Constitutes Indian History*

The History And Culture Of The Indian People: vol. I, *The Vedic Age* (London 1951); II, *The Age Of Imperial Unity* (Bombay 1951); III, *The Classical Age* (Bombay 1954). ed. R.C. Majumdar and A.D. Pusalker. Prepared under the direction of the Bharatiya Vidya Bhavan's president the Hon. Dr K.M. Munshi, with a Foreword by him to each volume.

These are the first three of a projected ten-volume history of India, which is one of many recent projects for a completely new history of the country. from a national point of view. Like the others, it was originally sponsored by a committee—in this case mostly of Indian businessmen—but actually written by a team of well-known workers in the field of Indian history. The volumes are priced at Rs 35 each; quite reasonably, considering the attractive printing, excellent overall getup, and the current high prices for such work. Comprehensive indexes, general tables of chronology, bibliography, lists of inscriptions and other sources, and good illustrations fit the work for general reference. These will supply the demand for historical text books—so-obviously kept in mind during the preparation—in our teaching institutions, to replace the works of Vincent Smith, the collective but still incomplete Cambridge history of India, though perhaps not the multitude of potboilers annually produced by indigent professors of history.

1. When this has been said, the critic is in the sad position of having exhausted all praise that could be bestowed upon such a work. The defects are only too prominent. The calibre of analysis is uniformly low, coordination poor among the contributors. No argument is too feeble so long as it is specious, no evidence too slender provided some imposing

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conjecture may be hung upon it. Examples of these weaknesses are plentiful, particularly in the first volume. Different authors differ radically about the evaluation of the Indus valley culture as Aryan or pre-Aryan, some going to extraordinary lengths to maintain a thesis. Pusalker (1.194) finds 'saddles in some of the lowest strata at Mohenjodaro', though the strata have not preserved any of the materials from which saddles are made. The weak secondary reference to Gordon Childe could have been traced back to our Archaeological Survey report, where no mention of saddles is found. Moreover, we find the horse regularly harnessed to a chariot, never ridden, for centuries after the last possible date for the ruin of Mohenjo-Daro. The natural query is, why did saddles go out of fashion suddenly, to be rediscovered so long afterwards; the answer would be that they didn't exist at Mohenjo-Daro. B.K. Ghosh (1.209) gives a philologist's view of mesolithic Tripolye pottery, when the only views that could possibly matter are those of the archaeologists who excavated Tripolye and parallel cultures, and who have shown evidence for transition to and from a matriarchal clan organization of which neither B.K. Ghosh nor the Aryans he is supposed to be discussing seem to know anything. Dr Suniti Kumar Chatterji favours us with the following pearl of wisdom: 'We may admit the possibility of Sumerian and Austric being related, for we have to remember that the proto-Australoids, who are supposed to have been the original speakers of Austric, were a very ancient offshoot of the Mediterranean race, and as such in their trek to India where they became specially characterized they may have left some of their tribes on the way, or some of their kinsmen may have preceded them and established themselves in Mesopotamia, to become the Sumerians who built up the basic culture of that part of the world' (1.153). I do not profess to know just what, if anything, this means; but some questions propose themselves even to a non-philologist's feeble understanding: Did the Australoids trek both to and from the Mediterranean? How did they *trek* across the ocean? How is it that they developed so much culture all over the world, but themselves remained naked, food-gathering savages without boats or even pottery, in their Australian homeland?

2. *Basic questions*. Our historians have less difficulty in making intelligible statements in the two later volumes, for the material has been chewed over again and again by their predecessors. But here the fatal defects of preparation and reasoning become more obvious, even without the resounding platitudes and vapid bombast of the directorial Forewords. In the first place, our sources have been thoroughly discussed by

able scholars in Europe, from Lassen down to the present day; perhaps the inability to follow a general discussion in European languages other than English affects the writers here but they manifest a singular reluctance even to state, let alone come to grips with many of the difficulties. The reader can see what is meant by this reproach, on comparison of the second and third volumes with the crisp presentation of essentials by L. de la Vallée Poussin in *L'Inde aux temps des Mauryas* and *Dynasties et Histoire de l'Inde*. The difference between compendious mediocrity and a real scholar's command of vast material as well as of the difficulties of interpretation becomes clear. In spite of the new discoveries in the two intervening decades, the comparison is not in our favour.

These are objections to technical procedure. Far more serious is the failure to present the main problems of Indian history. It does not matter so much whether the Indus valley people had a king or not; but did they have the plough, or only a harrow with which to stir the muddy soil of river-flooded lands? Why did they not produce a surplus comparable to that in Mesopotamia, where a much denser urban population is found in contrast to just two large cities and several tiny settlements of the equally fertile Indus valley? When and where did the metals come from, in what quantity? Without this being carefully treated, there is no chance of seeing how India developed from the stone age to civilization. Why did India never have large-scale chattel slavery as in classical Greece and Rome? When did regular coinage appear? What, in particular, did Aśoka's coins look like? The answer exists, but one finds nothing about punch-marked coins in the entire work. What was the essential difference between the Mauryan and Gupta empires, if any? Why did the latter produce great Sanskrit literature, not the former? On the other hand, why do Buddhism, Jainism, the Ājīvikas, and so many other contemporary religious sects of the type arise in Magadha, all becoming prominent at about the same time? Does this have no connection with the imperial expansion of Magadha, of which so much is made in volume II? Why had Patna, once the greatest city in the world, dwindled to a pair of villages by the time of Hiuen Tsang though the surrounding countryside was quite as productive, fertile, prosperous as before? Why did the Greek Menander not try to introduce the Greek way of life (or at least something like the Athenian academy) into the country; why did he and so many other Yavanas, Śakas, and other foreigners turn to Buddhism or 'Hinduism'? Why did this trend suddenly change with the Islamic conquest—yet gradually reappear by the time of Akbar in a totally different manner?

3. *The bourgeois conception of history*. Many of these questions have

been shirked by European historians as well, none dealt with satisfactorily even by them. Why then blame our new historians? The chief reason for censure is that they try to initiate a completely new type of Indian history, but succeed only in replacing foreign bourgeois prejudices with those of the Indian bourgeoisie. In the preliminary remarks to the first volume, both Munshi and Majumdar dismiss with contempt the nomenclature of the 'so-called Muslim period'; it may be correct to eliminate the term altogether from Indian histories, but the proposal is surpassingly incongruous when made by two Hindus with good Muslim professional names, Munshi and Majumdar.

The European historian of India took his conception of history ready-made from a long tradition. Herodotos, Thucydides, Polybios, Livy, Tacitus are classical models of a sort unknown in India, while their words convey excellent meaning because of extensive archaeological work in Greece and Italy. Even the medieval European chronicles contain more history than Kalhaṇa's *Rājataraṅgiṇī*, our solitary chronicle. Otto of Freisingen wrote a better history of Europe than was possible for India as recently as a hundred years ago. The bourgeois approach is scientifically correct, as based upon careful analysis of documents, collation with archaeological remains, inscriptions, coins. The modern Indian historians have tried precisely this, with a quite superficial difference of bias. This is not the ludicrous 'Indian history' that is still being written, with the *purāṇas* as gospel, dating the Vedas back several million years, crediting our mythical sages with every modern scientific discovery down to the electron and the bacteriophage. The present work is written in a foreign language, English, and strives desperately to be respectable by foreign standards. Where Vincent Smith's work, as revised for our consumption under British rule, contained glorification of empire, of strong central rule, of firmness on the part of the ruler and loyalty on that of the subject, the present tendency is to prove that we Indians were as good as the conquerors, with a past no less glorious than anyone else's. Only, this proof is being attempted with borrowed European standards of evidence, logic, and ratiocination grafted upon all the imponderable metaphysics of sanctified Hinduism.

But does the evidence, so overgrown with the rankest myth, fable, legend, suffice to write this kind of history? All that is known of Khāravela is contained in 17 defaced lines of his own inscription, of which the restorations have been disputed time and again. What difference does it make if one useless dynasty succeeded another when we can supply nothing but an incomplete list of names in each case, with doubtful chronology, unknown territorial holdings, and whole chapters to be rewritten by misreading a single letter in some epigraph which does not attempt to record anything more important than the donation of some patch of land or the dedication of an image. Even the Sanskrit langauge is so indefinite, with so many meanings for each word in literary usage, and virtually no meaning at all for the surviving technical terms, that the same phrase can give a dozen different translations; even now, no one can explain convincingly what the *bhūmicchidranyāya* of copper-plate charters really meant. To put it bluntly, we cannot possibly dream of matching a European history of some European region in scope, detail, chronological accuracy. Any such attempt with the material at hand is certain to lead to works like the one being reviewed, with endless loose strings of unprovable conjecture attached to every little fragment of data. Eduard Meyer's *Geschichte des Altertums* presents far more accurate conclusions simply because the sources allow them to be extracted. We shall have to adopt some other norm of historiography or become ridiculous as when maintaining (2, chap. x) that king Vikrama of 57 BC existed because there is no evidence that he didn't.

4. *What is history*? No historian can say everything that happened, having often to select from sources that have already selected what seemed important enough for them to be recorded. Thus the conception of what constitutes history changes with the times, with the class in power. A partial answer to the inquiry has been given in some of the questions propounded in section 2; the implication is that any serious history should be able to answer questions of this type. To state the matter as a definition: *history is the development in chronological order of basic changes in the means and relation of production*. Any other type of history deals only with the superstructure, not with essentials. It doesn't matter if king Tweedledum succeeded Tweedledee, or the reverse: but whether the production and use of iron was first developed under Dum or Dee is a problem of a totally different order of importance, which might then make it essential to determine which of the two came first.

From this point of view, Indian history can be dealt with, on a modest but sufficient scale, even with the sources at hand. The failure of the Indus culture to expand is patent; they hadn't the food surplus, nor the metals, nor the social organization needed for clearing a wilderness. The Aryan advance was first along Himalayan foothills, with a class structure within the tribe which first appears as two main *varṇas*, *ārya* and *dāsa*, rapidly developing into the four-caste class system, the *cāturvarṇya* that Munshi finds so mystically appealing. The settling of the Gangetic plain meant clearing a dense forest, hence the availability of cheap metals like iron. This accounts for the rise of Magadha, which covered the route to metal dsposits in Singhbhum and Dhalbhum, as well as straddling the great transport route, the Ganges. Mauryan and immediately preceding state enterprise concentrated (as the *Arthaśāstra* so clearly states) upon settling waste lands with predominantly *śūdra* villages. The Brahmin had to change over from a sacrificial priest of the costlier Vedic type, to begin penetration of the wilderness on his own. The very names of our numberless castes, the innumerable local superstitions practised by Brahmins with rewritten scriptures or without any reference at all to scripture, attest the mutual interaction of tribal and agrarian society. But the nature of tribal cultures, the various methods whereby the advance to a general society beyond the tribe was achieved, receive no consideration whatever from the Bharatiya Vidya group, which thus discards the main achievement of ancient Indian history. Some of the progress of village settlement over primitive tribal territory took place by direct conquest; a good deal by quiet absorption; some also by tribal chiefs turning themselves into absolute monarchs with Brahmin theological backing, and a standing army paid out of regular taxes. It is difficult to believe that the Ikṣvākus (2.224–6), Pāṇḍuvaṃśīs (3.220–2), Nalas (Niṣadas, from *niṣāda* surely rather than *Niṣadha*) and similar dynasties had anything to do with the legendary epic clans, except by the fertile imagination of Brahmins who found it paying to invent genealogies for aboriginal families that had risen to power. The economic status of a tribe at the time of absorption is generally reflected in the social status of the caste which it usually became. The essential change is that totally disarmed agrarian villages sprang up where there had been much thinner tribal settlements before. This is what is meant by the Aryan conquest of the whole country. Those tribesmen who did not take to the plough could not support so large a population by more primitive food-gathering, hence survived only in pitifully small groups as compared to the village settlers with their ampler and more regular food production. With great increase in the number of villages came a decline of the ancient guilds, which also degenerated into caste. Empires broke up into smaller kingdoms at war as local production increased in the wilderness. The dominance of the relatively changeless self-sufficing village where only the rotation of the seasons had a meaning, not the succession of the years, destroyed Indian history, as it destroyed historiography through its intellectual product, the incurably rustic Brahmin. It is the stagnant village that gave to the caste system its theoretical rigidity in spite of many new castes recruited from tribes and guilds. Commodity production per head declined, as most of the produce was consumed locally; this meant the decline of cities as centres of production. The problem of increasing commodity production was solved in part by force, in the feudal period—Islam's chief contribution to India—which promoted trade in the expropriated surplus and connected India more tightly with a much larger international market. This is the period also of annals and light histories, which go naturally with such trade; the period when Munshis and Majumdars were created, though not their mentality. The final consummation had to await a totally different form of production, a new concept of property based on commodities produced by power-driven machines, and exchanged over long distances, thus bursting the fetters of local village production. This came with the British period; it called into being the Indian bourgeoisie and a new, bourgeois conception of history. In view of the late date when the Indian bourgeoisie came to power, a period when the whole bourgeois mode and world were in a state of incurable crisis, it is clear that neither the history acted, nor that written, by the class can last very long in India. The specific feature of Indian history, progressive exploitation of the worker under a dual burden of caste and class, cannot long remain buried under such vain glorious praise of Indian 'culture' and philosophy. The effort to prove equality of the present ruling class (and of the supposed ancestors it has found for itself) with the ruling class in some western countries may help secure foreign intervention in time of need; it will not prevent the internal struggle from maturing all the more rapidly.

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The Basis of Despotism*

The contents of this impressive, beautifully printed and well got up publication with its usual paraphernalia of current American scholarship leave very much to be desired. Perhaps the most extraordinary feature of this book (and many others like it) is the profoundly meaningless terminology, such as the following: hydraulic civilization; agromanagerial society; agrobureaucratic and agrodespotic regimes. One can understand the function of the fluid in the working of a hydraulic press, a hydraulic lift, or a hydraulic ram. How it operates in a 'hydraulic' society—apart from the fact that human life cannot exist without water, and that water is not uniformly distributed upon the earth's surface—is not made clear by all the pseudo-scientific verbiage of the initial chapter. The one clear statement is that hydraulic states sadly damage the rights of private property—the ultimate and unforgivable sin. 'Oriental despotism', as if it were plague or cholera, succeeded in infecting Rome without benefit of hydraulics. The whole performance is reminiscent of Lewis Carroll's Jabberwocky, the more surprising because semantics is so fashionable in the U.S.A.

The word 'Oriental' is sometimes used as synonymous with 'Asiatic' though frequent references to Egypt, Mexico and Peru show that the geographic limits are not essential. Nero and Caligula were certainly more powerful and more despotic than any oriental despot; but neither they nor Tiberius, with his unspeakable vice and cruelty appear in the book. Our present author goes so far also as hydraulic-oriental despotism. It was, apparently, introduced by Augustus in Rome, much in the same way as smallpox was introduced by the Spaniards into America,

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**The Economic Weekly*, vol. IX, no. 44, November 2, 1957. (Bombay, Nov. 1957), pp. 1417–19. [This is a review of *Oriental Despotism: A Comparative Study of Total Power* by Karl A Wittfogel. Yale University Press 1957.]

and syphilis by the Portuguese into India. There is no discussion of one undisputable Oriental book which praised despots provided they did not follow the wrong cult, and which gained tremendous authority as well as circulation in the West—the Old Testament.

The author, so we are told, experienced the despotism of absolute total power at first hand in one of Hitler's concentration camps. Yet, there is no analysis of that particular experience. On pages 143 to 149, we find that terror and torture are prominent features of oriental despotism. 'It was left to the masters of the Communist state apparatus to reverse the humanizing trend and to reintroduce the systematic infliction of physical pain for the purpose of extracting "confessions" ' (p. 147). Was there no torture worth the mention in any of the Nazi judicial procedure and 'confessions' obtained in Fascist Italy and Germany, or for that matter third degree methods employed elsewhere (including the 'benign' rule of the British in India)? The reason for this rather lopsided emphasis is very simple. The clear and imminent danger against which the book warns is that of communism. Apparently, communism is the most dangerous form of Oriental despotism and total power. Marx, even more Engels and Lenin (so the author tells us), used all their intellectual power to disguise the fact that they were really introducing Oriental despotism into the West. It is, therefore not surprising that the Chinese, in trying to introduce Western civilization, mistakenly adopted the Soviet system which was really their own Oriental despotism imposed upon Russia by Lenin! Nehru's India seems (to the author) naively ambivalent. This means that the evil present in the communist danger has not sufficiently impressed itself upon the Indian mind.

The author has hardly considered the monsoon worth mentioning as fundamental in Indian 'hydraulic' society; or, for that matter, caste—which all foreigners from the classical period to the present day seem to regard as a peculiar and very important feature of Indian society. Thana is mentioned twice but only because of a worthless fourth-century Nepali legend about its merchant guild. Sopara is, in the author's geography, 'one of several settlements located on the coast of Thana, south of modern Bombay'. The Manigramam, the Shreni, or the Vira-Vanunja trading caste in India, and the giagantic and really powerful Hong merchant's organisations in China are not allowed to disturb the reader's consciousness. The *Arthashastra* is quoted (without understanding) several times, but nothing whatever has been said of the benign rule of Ashoka, just after the *Arthashastra*. Why this sudden reversal of despotism in that brief interval of not more than 50 years, without any corresponding change in

Indian hydraulics? Why is no mention made of the Chinese travellers' emphatic account that under the Guptas (fourth to fifth centuries) and Harsha (early seventh century) penal legislation was extremely mild, labour was not dragooned and no torture used in the examinations of witnesses? In a study of 'Oriental despotism', why is it essential to omit periods when the rule struck all observers as being singularly kindly and unoppressive not only in form, but in fact? How does it happen that the laws of the Roman Twelve Tables and the first Athenian code were far more draconic than under such 'despots', if not because of the right of private property first showing its teeth and claws?

On page 141, we find the following: 'Lenin defined the dictatorship of the proletariat—which he held to be the heart of the Soviet regime—as "a power not limited by any laws" '. Like other utterances of Lenin, this formula combines an impressive half-truth with important fallacies.' The half-truths and fallacies derive only from Professor Wittfogel. Lenin was first defining dictatorship as such, and not merely that of the proletariat. Dictatorship is precisely rule not bounded by law; and this definition goes back to the days of the Roman republic when, in times of emergency, the people and senate agreed to set up a dictator whose orders would be obeyed for a specified period without question as to their legality. Such dictatorship cannot possibly be written off as Oriental infection of the truly unhydraulic Roman mind.

Similarly, on page 447: 'The Second Industrial Revolution, which we are now experiencing, is perpetuating the principle of a multi-centred society through large bureaucratized complexes that mutually—and laterally—check each other: most importantly, Big Government, Big Business, Big Agriculture, and Big Labour. But the destruction of one major nongovernmental complex may bring about the downfall of others. Under Fascism and National Socialism, the liquidation of Big Labour so strengthened Big Government that eventually Big Business and Big Agriculture were also threatened. And in Soviet Russia the liquidation of Big Business and Big Agriculture quickly enabled Big Government to subdue labour.' This might raise a dangerous question: the responsibility of Big Business and Big Agriculture in helping fascism suppress Big Labour. The author hastens to bypass it in a footnote: 'Moscow's role in Hitler's rise to power is a similarly neglected issue'. No mention of Thyssen or Krupp; nor of the unfailing Western support of Hitler almost to the beginning of World War II.

It is depressing to note that Hitler, after all, has scored a victory if a graduate of his concentration camps imbibed enough of the 'master-race' philosophy to damn so widespread a social phenomenon as 'Oriental'. This parallels the extraordinarily weak hold upon the ideal of pure liberty that the Greeks themselves manifested during their brief period of glory. They might deride the Persians for not having tasted the joy of sweet liberty, but the book fails to mention what the Athenians did to ruin the freedom of Melos, and what happened to the liberty of Plataea at Greek hands, in the Peloponnesian War. Militiades, a private citizen of free Athens who had led his side to victory against the Persians at Marathon, was also the tyrant of the Chersonese; this did not diminish Byron's poetic admiration for both Militiades and liberty. Pausanias, field commander in the Persian war, missed a coup d'etat against his own state. He starved to death in an unroofed sanctuary at Sparta, ringed in by the very men whom he had led in defence of the liberty of which he then tried to deprive them. The Athenian naval commander in the same war, Themistocles, had similar designs at Athens, but escaped in time to serve the Persian despot as provincial governor, without any further qualms about the loss of his ineffable liberty.

What is the tap-root of despotism? Marx noted that the Asian states performed a considerable economic function in development and control of irrigation; but that the solid foundation of Asiatic despotism was furnished by the passive, unresisting stratum of producers in the virtually self-contained, stagnant villages, whose produce did not become a commodity till it reached the hands of the state. There is no esoteric doctrine here about hydraulics and 'statism'. It might be suggested that the passive, unresisting stratum of Indian peasants in Latin America has something to do with the constant resurgence of tyrannical dictator-presidents like Trujillo. If such a despot has any other prop, it is neither the water supply, nor communist instigation, but some foreign company capitalized in the land of free enterprise and liberty for the stockholders.

'The history of hydraulic society', says Wittfogel (p. 329), 'suggests that the class struggle, far from being a chronic disease of all mankind, is the luxury of multicentered and open societies'. This is the same sort of nonsense that derides socialism because it is supposed to deprive the workers of their most precious possession, the right to strike, which is far more important than a living wage or control of the state. Yet, the painful maxim, 'Better the tyranny of one than the tyranny of the many', goes far back into Greek antiquity. Despotism is clear evidence of some acute internal struggle. By formal outward submission to the absolute authority of the state, or of a despot—raised, if necessary, to the level of a cult—a particular class can effectively disguise its own need for, and benefit from, the despotism.

The Roman senatorial and equestrian orders were based on the possession of wealth. The citizen whose property assessment fell below the requisite level would lose the privileged status at the next census. In the last days of the Republic, the greed of these classes in extracting wealth from the provinces had attained intolerable lengths. Cicero's oration against Verres shows how a patrician could strip a province unhindered. The case was won by the provincials, without restitution of the loot or punishment for Verres. That model lover of liberty, Brutus, loaned money to a tributary Asian king at 48 per cent annually compound interest. He asked Cicero to call out the nearest Roman army, to collect payment on the debt. The emperors, with their paid civil service of freemen and slaves, at least restricted the robbery to less intolerable limits; they held the balance of power between looter and looted. The progressive deification of the Roman emperors had its basis in the need to minimize the use of force, always a costly proposition, during expropriation. The last remnants of Republic pretence were dropped by the emperor Diocletian because the structure of the state no longer corresponded to such fictions. The 'Roman' legions had to be recruited primarily from barbarians near the frontiers. The Italian heartland whose free, small-holding, peasant citizenry had been eaten up by the *latifundia* of the patricians could supply neither soldiers nor officers.

What makes despotism inevitable is not Orientalism, nor hydraulics, but the particular type of production: how much surplus is forcibly expropriated by the state for its own use and that of the class it mainly serves. Despotism would have no function in a primitive tribal society; but should a tribe reach a certain level of development, a cruel despot like the Zulu Chaka seems a natural phenomenon. Even so, his cruelties as reported by unsympathetic foreigners who wanted to justify intervention and conquest do not match the cold, treacherous malice of the Roman Republic towards any opposition, nor the Spartan massacre of Nikias and about 7,000 Athenian prisoners of war after the battle of Syracuse. Not the insidious vileness of Orientals, but the need to industrialize at all costs in the face of a uniformly hostile environment explains the stresses set up in the first state to be ruled by a Communist party—the USSR. On the other hand, the despotisms that many lamented under fascism were engendered by the unrestrained exercise of the rights of private property.

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On the Development of Feudalism in India*

The main purpose of this note is to review critically a paper by K.A Antonova: *K Voprosu O Razvitii Feodalizma V Indii* (Ak. Nauk USSR, kratkie soobschenia instituta vostokovedeniya, III, Moskva 1952, pp. 23–32). At the end, Prof. Antonova draws the following conclusions (free translation):

'Feudalism was beginning to develop in India in the Vth–VIIth centuries, about the same time as when feudal relations began to develop in the other countries of the middle and near east. Clearly, at that period the level of growth of productive forces of India did not lag behind the level of other contemporary advanced countries. From the records of the V–VI centuries, we see that land grants were no longer of uncultivated lands but inhabited villages; the free members of the community were gradually made to pay taxes, various kinds of dues were introduced, and immunities granted. From the land grants of the VII–VIIIth centuries, we see that the system of feudal hierarchy is already established, the peasants are enslaved by means of various imposts, and rent (both in money and in produce), while the feudal lords are given, nor merely the right to collect taxes, but definite plots of land as well. We find that in future these land grants will reflect the struggle between the feudal lords and the "burghers" (of the middle ages) for their domination in towns with the ultimate victory of the feudal lords. The victory gained by the latter might have caused the backwardness of Indian feudalism and the strong obstacles for the development of capitalist elements in it. The picture of the political development of India confirms the information supplied by epigraphy. The period between the Vth and the VIth centuries is the period of disintegration of the Gupta empire as well as the period of various invasions in India that weakened its social and economic transformations. In the seventh century in northern India there existed the empire of Harsha. According

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to the description of Hiuen Tsang, there already existed a community with the natural economy where there was a firmly established custom of giving away land to landlords. In other words it was an established feudal society.

Since the documents dealing with land grants are found all over India it proves that the process of feudalization was taking place on a very wide scale, though perhaps it was not so vigorous in one part of the country as in the other. It stands to reason that this did not affect the pre-feudal relations existing in backward regions and in the tribes living near the borders, where these relations are preserved up to now. With the establishment of the power of Muslim conquerors in northern India these forms of feudalism were partly changed; however it did not in the least change the existing feudal ways of exploitation. In the period of the Mughal empire the overgrown Indian feudalism worked out (1) the form of the so-called military grants—*jagir*—where not land was granted but only the right to collect the *rent* from peasants; (2) a certain centralization of the entire land revenue in the hands of the central government which alone had the right of granting land. Instead of fairly considerable temple land-grants the Moslem authorities applied the system of small 'brahman' land plots. They were giving them away on the principle of inheritance to some of their sheiks, calling these land grants *sujurgal*. Such was the further trend of Indian feudal land ownership'.

I. The quotation above, though not a literal translation of the final paragraphs of Antonova's paper, at least represents her opinions fairly. The main criticism is that specific features of Indian development from the fourth century onwards have not even been mentioned. The presence and decay of extensive tribes, the new functions of caste and Brahminism, the real growth of plough agriculture plus village settlement all over the peninsula, rise of the trade volume in spite of decrease in commodity production per head, do not appear here at all. The problem of commodity production was in fact crucial for the form of the state apparatus. These matters have been dealt with in two papers of mine: 'The basis of ancient Indian history' *JAOS*. 75, 1955, pp. 35–45 and 'Origins of feudalism in Kashmir' (*BBRAS sārdhaśatābdī* volume). The case of Kashmir is particularly important, as there is not the excuse of foreign invasions, decay of empire, new religions, and so on, but a straight fight between central and feudal power ending in the complete victory of feudalism. Not only do burghers fail to appear, but the individual merchants who might have become burghers sometimes turned into feudal lords.

It seems to me that, besides neglecting to examine other source material besides those inscriptions that appeared in the *Epigraphia Indica*, Antonova has not even understood the *EI* inscriptions that she quotes in such an impressive display of scholarship. This may be the main reason why, from the very same inscriptions, I have been able to draw far more detailed though fundamentally different conclusions in the first of the two papers mentioned above. To point out her errors at every stage would take much more space than is warranted by the misleading contents of her note, but we may consider, for example, just one of the opening paragraph, Antonova's p. 23:

> Inscriptions record for the greater part grants and land donations made to temples, the priesthood, and charitable foundations, but also to captains, (*EI*. 3, 221–7; 5.131–4; 22. 86–92; 23. 68–9; 141–2; 21. 41–7), chief of battle elephants (5. 142–51); the ruler's son-in-law (4. 183–5); mother of the ruler (4; 113); court scribe (27. 297–309); vassal (27. 174–6); court physician and astrologer (5.150), obscure functionaries not clearly visible except that, in all appearances, they held some sacred office (9. 17–21; 9. 22; 22.77) etc.

The implication of this paragraph, taken in connection with what follows and particularly with the final two paragraphs which represent Antonova's conclusions, is that land grants were made in India in about the same way as in other feudal countries, though perhaps the temple and priesthood received somewhat more weightage. In actual fact, the Indian 'priesthood', namely the Brahmin caste, has no parallel in that of any other country during those centuries. The Brahmin is in the earlier period not only the *almost exclusive* recipient of land grants but he is usually unconnected with any particular temple. Why this should be so is not explained, being not even noted by Antonova. If I have not misunderstood her (oral) explanation, she thinks that caste is of no importance to the serious materialist historian, because a tanner tanning hides gets the same results whether he belongs to a special tanner's caste or not. To my mind, this throws away what little remains to us of source material in Indian history, *for caste is an important reflection of the actual relations of production, particularly at the time of its formation*. However, let us look a little closer at the list of inscriptions cited in that single paragraph.

The first series is of 'land-gifts to captains'. In *EI*. 3, 221–4, the gift is not to a captain as such but dowry on the occasion of his marriage, apparently to the king's daughter. Apart from this being unusual, note that the plate dates from the eleventh century AD, and deals only with a poorly developed region, that of Ganjam (Orissa). In 5. 131–4 we see an Eastern Cālukya Amma I (probably of the early tenth century) giving the village of Drujjala to a warrior not for valour or loyalty alone—though they are mentioned prominently—but for being the king's foster-brother in a foster line. In 22.86–92 we have in the southern peninsula, a reward for services in war, to the general who defeated the interventionist attempts of the Ceylon king Parākramabāhu, in the third quarter of the twelfth century AD; 23; 68–9 takes us back again to the Ganjam area, and the year

AD 1068, the grant being to a captain. In 23.141–3 the grant is by a small chief to another captain, again in the Ganjam district, during the eleventh or twelfth century, neither date nor any specific cause for the grant being specified. Finally, 27.41–7 shows us Amma I again giving a village to one who seems to have been in the family of village headmen; this was a gift made for a very special occasion, namely that of an infant prince first taking solid food. *The editor of the record notes it as very remarkable that all four grants of Amma I known to that date were to captains, not to brahmins.* We must emphasize that these grants are all very late, and all in less developed eastern regions of the country. In general, there is no early record of such grants having been the usual feudal reward for services in battle nor do feudal lords appear to have been the normal landholders. The relationship is nowhere near that of feudal baron or landlord to the king in medieval Europe. In none of these grants are any feudal dues required from the recipient, for the usual taxes to the state now become the donee's perquisites, which he cannot increase; no mention is made of any military service to be exacted from the recipient or his descendants. What is granted is *not* the land, but simply the rights over the land that had been claimed by the king; if we argue that this means transfer of ownership, it follows that the state owned all land in medieval India. But what can be deduced about the whole of India during the IVth to IXth centuries from southern grants of the Xth or later centuries is not clear to me.

In *EI*. 5.142–50, Antonova tells us, land was granted to the chief of battle elephants. Actually, Jaya, the nominee, is simply appointed in AD 1213–14 to administer a township, all of whose income seems to have been earmarked for the use of a great temple and of its many servants; the general was appointed merely to regulate the various shares on behalf of the king, as is clear from the inscription itself; in 5. 150, no land grant is made to 'court physician and court astrologer' but shares of produce are assigned by the same general Jaya for two of the servants of that temple. *EI*. 4. 113 refers to a plate of the Gāhaḍavāla king Govindacandra, dated AD 1141–2; the land is granted to a Brahmin, not to the king's mother as Antonova somehow concludes. In 27.176–82 we do have a gift to a subordinate, but the date is AD 1115. The 'obscure functionaries' supposed to have held some sacred office are not functionaries at all, but Brahmins, like the overwhelming majority of the recipients in all grants of all periods; that the grants are mostly in Sanskrit even when the language of the region and of its ruler could not possibly have been Sanskrit, is equally significant. Nothing in Antonova's essay explains this remarkable feature of Indian charters.

The rest of the material has been handled with an equal contempt for its meaning and contents, whether from ignorance of Sanskrit or strong preconceptions about 'Indian Feudalism'.

2. The choice of material, unfortunately, is also too restricted. Antonova would have found quite good sources in Fleet's volume of inscriptions of the Gupta period, supplemented by other publications. If we seek gifts of whole villages, we can see them in the Pali canonical work *Dīgha Nikāya*. At the beginning of the third *sutta* of this work we read that at that time, the Brahmin Pauṣkarasādi (in Sanskritized form) was endowed with the village of Ukkattha by Pasenadi, king of Kosala. Similarly, at the beginning of the fifth *sutta* of the same work, we read of the Brahmin Kūṭadanta having been endowed by king Bimbisāra of Magadha with the village Khanumata. The 12th *sutta* begins with the mention of Salavatika, a village that had been given by the Kosalan king to the Brahmin Lohicca. The *Dīgha Nikāya*, though supposed to represent the tradition with accuracy, was written after the Buddha's life-time. But it cannot have been composed after the reign of Aśoka, while there is no reason to believe that the village names and gifts were invented still later, if indeed they were inventions. Therefore, the tradition of such royal gifts of villages as appears so often in the *EI* inscriptions goes back not merely to the V-VI centuries AD, but at least to the third century BC, and in all probability to the sixth century BC. The gifts were not entirely to Brahmins, because in the 23rd *sutta* we hear of the prince or subordinate ruler Payasi, described as a *rajañña*, as being lord of the town of Setavyā, by gift of king Pasenadi. The *Jātaka* stories mention a village as dowry for a princess, namely Ajātasattu's mother, but these stories may have been re-edited as late as the fourth century AD. If such gifts constitute evidence for feudalism, then feudalism in India has to be put nearly a thousand years earlier than Antonova has done.

It is not clear just what she does mean by feudalism, but inasmuch as she talks of a feudal hierarchy being established, it is worth pointing out that there is no evidence whatever of a feudal hierarchy as such in India during the VII–VIII centuries, nor at the earlier stages. There are kings served by non-hereditary officials removable at the king's will; some subordinate kings pay tribute to an overlord like Harṣa, being then left in undisturbed possession of ancestral holdings. But we fail to see any hierarchy or 'natural economy' in Harṣa's own inscriptions, or in Hiuen Tsang, or in Bāṇa's *Harṣacaritam*; the last two speak only of tributary princes, *sāmanta* (which originally meant independent neighbours) nor feudatories or feudal landholders. Even the *Manusmṛti*, which cannot be later than about AD 200, mentions feudal features such as the corvee (supported by Rudradāman's Girnar inscription, *circa* AD 150) in lieu of taxes, from artisans; and payment to revenue officials by charges upon the revenues—but no hierarchy; hence it seems to me that this does not constitute feudalism in full. The matter has been discussed, along with the *Arthaśāstra* state, in my paper 'Ancient Kosala and Magadha' (*JBBRAS*. 27, 1951, pp. 180–213) and the other papers cited.

It may be said here that no understanding of feudalism in India is possible without reference both to the historical background, and to the environment. The former had left the tremendous Mauryan tradition of a centralized all-powerful empire, an empire whose main source of revenue was the tribute from new villages mostly in the Gangetic valley, on waste land, settled by *śūdras* under direct state supervision. Though earlier principalities and tribal settlements were left alone on condition of not raising rival armies and paying much smaller taxes than the *sītā* state lands, they were not the major component of production; officials were not feudal, but salaried state servants paid in cash. As for the environment, it was overwhelmingly tribal. The new settlements were not actively promoted by the state after the Mauryan period, but arose from Brahmin pioneering in central India and throughout the peninsula which introduced plough culture in tribal areas, leading to entirely new forms of land relations and property. These broke up the tribes, forming new states which could not yet be feudal. This is the main difference between the Gupta and the Mauryan periods, while the decline of the Gupta rule is not due to feudal decay or to invasion, but merely to the preponderance of village production as against centralized commodity production based upon the cities. There were no burghers of any importance to conduct the purely imaginary struggle with feudal lords mentioned by Antonova; cities decayed rapidly and naturally, except the port towns where trade continued to increase slowly because of overseas contacts. Most striking of all is the fact that the *śreṇī* guilds which were prominent during the Gupta period and earlier disappeared altogether, being replaced by free village artisans who were protected against over-exploitation by their caste, and had in fact to be bribed to give the village a certain minimum regular service, such as that of the village carpenter, blacksmith, tanner, barber, etc. So far from the free members of the community being 'gradually made to pay taxes' and various kinds of dues, both the number of imposts and their total percentage is far less even till the ninth century AD than in the *Arthaśāstra* and the Mauryan state of about 300 BC. Nothing of this appears at all in the paper under discussion.

3. On the other hand, there is evidence in the later inscriptions, even

in those whose contents are ignored by Antonova (though cited on the very first page) for a new type of land relationship that served as the very foundation of proper feudalism, namely land ownership by superior classes in special relation to the royal or state power. In general, the landgrant charters are addressed specifically to the *kuṭumbins*, 'family settlers', who are thereby informed that such and such a piece of land, or village is transferred by the crown to a particular donee. The reason and purpose are clear, namely that any of these settlers concerned are thereafter to give to the donee all those taxes, that were paid to the king before the grant; the donee is not to pay a share thereby to the state as would a normal feudal baron. Let it be noted that there is no question of progressive taxes grinding down the peasant. In the first place, there is no word of the donee being empowered to collect more than the previous state dues, nor of his having any type of land ownership, beyond the grant of taxes formerly taken by the state. In the earlier period, such as with the Faridpur plates of the early sixth century in Bengal, plots were given, in the presence of leading settlers and officials, to the Brahmins, on payment by some rich merchants of the commutation fee for taxes—which has been misinterpreted as 'purchase price'. The land had not previously been cultivated; what has been purchased from the state is clearly and solely the right of the ultimate possessor (Brahmin or temple) *to enjoy the land in pertetuity without taxes*. This is further proved by the Gupta period Damodarpur plates (*EI*. XV.113–45) where the land whose freedom from taxes in perpetuity is similarly purchased is described explicitly as *samudaya-bahya* (free from taxes), *aprada* (never before given away), *khila* (marginal). The deposit of payment for the first of these five plates is described as *nīvidharmeṇa*, the equivalent of a modern trust-fund. Parallel to such Brahmins there must have been growing a class of landowners as distinguished from people who had no rights of ownership in the land, or rights insufficient for their maintenance. These last appear as tenants and landless workers by the time we have the full Muslim feudalism in developed form. This feudal development was in fact made possible by the existence of these two classes, and these types of very ancient tenure are reflected in the heritable and transferable *mirasdari* landholding on the best land where heavy taxes were assessed regardless of the cultivation of the land, and the temporary *upari* landholding on less fertile marginal land, where the assessment depended in general upon what was actually cultivated, both as to the particular area sown, and the nature of the crop.

This is known from grants and tenures of the Muslim period, particularly in Maharastra, but clearly goes back to an earlier form. In the pre-Mohammedan inscriptions under question, we find a special class of landowners mentioned just above the *kuṭumbins*, namely the *Rāṣṭrakūṭas* in the south. The name has been used also for a whole Kanarese royal dynasty, but in our inscriptions means a superior class of landholders with the right and duty of bearing arms in the royal service. For example, in *EI*. 5, p. 134, the *mahārāja* Viṣṇuvardhana issues: the land-grant as a proclamation to 'all the assembled *kutumbins* headed by the *Rāṣṭrakūṭas*', and the donee seems himself to have been one of these *Rāṣṭrakūṭas*, a warrior in foster-relationship to the king. In fact, the other five eastern Cālukya inscriptions published in that article all contain the same phrase *rāṣṭrakūṭa-pramukhān kuṭumbinas sarvvān āhūya*, so that it was clearly a special higher class of landowners. We cannot take them as merely village headmen, for the title of such a headman is *grāmaṇi*, which is known from the days of the long prefeudal *Śatapatha Brāhmaṇa*, well before the Christian era and before the rise of Buddhism. Thus we find Amma I, in the inscription so casually cited by Antonova (*EI*. 27, 41–7), referring to the donee as the grandson of a *rāṣṭrakūṭa* of the same village, the family having distinguished itself for three generations by special military service to the king, and exceptional devotion; the recipient Vemarāja is then made headman = *grāmaṇi* of the village, obviously over his fellow landholders. He is to pay only the tribute of 8 *gadyāṇakas*; most important of all, the revenue he is entitled to collect from the village is very carefully set out as yield of the particular crop, in Telugu, not in Sanskrit. Hence, there could be no question of his being a full landowner of the entire village, though he may be called a feudal vassal because of the 8 *gadyā-ṇaka* cash fee, and military service implied.

4. The question is, how early may we place this class of superior landowners, under whatever name they arose in the various parts of the country? The general rise of such a class cannnot be traced to a stage earlier than the late ninth century AD in India. The Damodarpur grants cited above have a royal subordinate (*uparika mahārāja*), his legate (*niyuktaka*), all other officials being small functionaries like the keeper of tax-rolls (*pustapāla*). As testimonies to the grants, the leading banker (*nagara-śreṣthin*), leading caravan merchant, leading householder and chief scribe (*kāyastha*) were united, which again implies absence of feudalism. In the list of royal officers warned by the copper-plate charters, we find a successive enlargement, showing the feudal hierarchy growing from above: *sāmanta, rāṇaka*, and so on, but later also the lower landholding titles like *ṭhakkura* whose obligations are not clear, but which sometimes (as in Kashmir) imply military service or duties, like the *nāyaka* in the south. In the quite normal Brahmanpalli grant of Karkkarāja Suvarṇavarṣa of AD 821 (*EI*. 22.77–85), the donor endows a Brahmin with

the village of *Brāhmaṇa-pallikā*, the name itself implying that Brahmins had first settled what had been a pre-plough tribal hamlet. Any land previously granted to other Brahmins is exempted from the donation. The recipient gains the right to keep for himself, without passing any portion on to the state, all taxes and dues hitherto collected for the king; but not the right to increase these in any way. He is also given the right to cultivate or cause to be cultivated all lands—which can only mean waste lands hitherto uncultivated and untaxed, but cannot refer to the land already in regular cultivation. The officers warned are *rāṣṭrapati* (minister), *viṣayapati* (governor of the district), *grāmakūṭa, niyuktaka, adhikārika, mahattara* (elders of villages or of village family groups). Just what the three intermediate officials were is not clear, though the *niyuktaka* has descended in the scale; they still do not seem to have been landowners of any sort, but may have been the precursors of a feudal hierarchy. Certainly, the *grāmakūṭa* here is not the *rāṣṭrakūṭa* of southern inscriptions cited above from later centuries. Finally, the king himself belongs to a branch of the royal house called Rāṣṭrakuta and makes the grant, small as it is, only with the consent and signature of his distant emperor, Amoghavarṣa. There is no feudalism here, as I see it. From about the tenth century onwards, we find grants made at the instance of feudal lords (*rāṇaka*) either confirmed by the sovereign (as in *EI*. 23.266) or without any mention of the sovereign (*EI*. 23.268, 141–3). At this stage we are definitely in the presence of a feudal hierarchy of some sort.

The more important question is, why was feudalism necessary? The problem seems to be that of increasing commodity production. When the country had been settled by almost self-sufficient villages, commodity production as such went down per head or population. Nevertheless, very few villages produced either of two indispensable necessities, namely metals and salt. These had to be acquired by exchange, hence there had to be some sort of commodity production. In fact, we see this in specialized local crops: saffron in Kaśmir, coconuts from the peninsular coast, cotton from certain restricted areas, and so on. The question is, who participated in this trade? Who made the essential part of the exchange whereby the product became a commodity reaching the ultimate consumer? The trader himself cannot do this, for someone has to have a surplus for trade and the roads have to be made safe. Hence we have a counterpart of the caravan trader, namely the private landowner and—or the feudal baron. The main food-producing land in a village was held in common, but the remaining marginal land was open to cultivation by private enterprise. It was in fact one of the functions of the Brahmins settled on the land by the copper-plate charters which form our main epigraphic source, to be model producers of new crops, generally for exchange. This has been shown in my note on the village community in the 'Old Conquests' of Goa (*J. Uni. Bombay*, 1947).* The feudal lord could protect the caravan while extracting dues from the trader but he was in addition himself the agent with whom the trader mainly exchanged goods of various sort, for the surplus was mostly gathered into his hands.

One of the features of Indian feudalism is that *slavery became more prominent then than before*, without being indispensable to the means of production. The reason is that the slaves formed the nucleus of the man-power that the barons needed to make them independent of the peasantry. They were used not only as specially privileged armed retainers, but also to produce cloth and specialized goods, a part of which was also traded; in addition, they supplemented the paid labour whereby special plots of land could be cultivated by the feudal landlord, directly for himself and his household, without leasing to the peasants. However, a slave could, and several did, rise to become emperor at Delhi. The economic function of the landlords went beyond mere tax, rent and tribute collection, in that they undertook essential works such as irrigation which were far beyond the means as well as beyond the territory of any single village. Nevertheless, the existence of trade is proved by the fact that many dues and most taxes gradually began to be assessed in cash, even when paid at times in kind. For land rent, two systems continued side by side: estimation and payment in cash, or an agreed sharing of the actual yield between tenant and landlord.

Hierarchical feudalism appears at times in Candel and other Rajput epigraphs, as administrators are mentioned for units of 84 villages. Karkkarāja (above) made his grant in a district of 42 village-units, but names no administrator. The full military hierarchy, settling soldiers on the land, taxes collected by feudal agents but only a minor portion passed on to the central state, and feudal lords manufacturing goods with slave labour all appear on the scene during the fourteenth century, in the reign of Firuz Tughlaq to whom (and not to the Mughals) the real, full development of Indian feudalism may be ascribed. It should be remembered that the feudal agent, whether landlord, or tax-collector, would take the amount of taxes from the peasantry, generally, as share of the produce; far more often, however, the payment which he in turn had to make to higher authority was in cash, not in kind. Thus he inevitably evoked the trader, and some exchange of commodities.

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Primitive Communism*

The question of primitive communism has aroused bitter controversy in recent years, perhaps because of the spread of modern communism. The misleading picture agreed upon as 'primitive communism' by many supporters and most opponents of the theory does not tally with any known reality. Primitive life in which all were on a level of equality, with promiscuous group marriage, with group responsibility, group justice, group property, absolute domination of the group over the individual, without individual self-interest or differentiation of individual rights and privileges—this is indeed a man of straw whom any one may knock down at will. What is wanted is some general description of society, built up by observation of savages today, which might reasonably cover the essentials, say over 10,000 years ago.

Communism is a type of society in which every person must contribute according to his ability, and will receive according to his needs. To some extent, every viable society must function in this manner, for little children and the aged or the sick can contribute much less than they consume. An example of misrepresentation is to be seen in primitive mother-right, which is often taken to denote a society in which women enjoy all the privileges that men do in modern bourgeois society. This ridiculous interpretation can also be disproved very easily, without in any way affecting the existence of numerous groups in which women controlled the major sources of regular production and thereby determined kinship, inheritance and property relations in their society. In the same way, we must look into the meaning of primitive communism without building up an idealistic picture. Of the several different connotations of the word 'primitive', the one that most interests us is 'very ancient'.

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Meaning of Primitives

The qualification 'primitive' implies that the means of production were not well developed. This would naturally condition ability to fulfil needs, as well as consciousness of the needs themselves. The need for an automobile, for example, cannot be felt in primitive society, while some machine-age men might prefer to go hungry rather than go without trousers. A much greater stress upon food gathering than upon food production characterizes primitive life. It also means a considerable emphasis upon ritual, because the fundamental processes of nature as distinguished from their final results were not clear to the primitive man. For precisely the same reason, clearly defined, sharp categories and our type of logical reasoning are not to be expected in primitive society. This complicates observation and interpretation. In the first place, the modern observer is struck by the superficialities of religion, ritual, superstition and apparently irrational primitive customs and behaviour. In this, the historical course of development of that particular group of primitive people is generally ignored, and no attention paid to the relation between their customs and their system of food procurement. Secondly, most observers forget that the group observed is not isolated. The very fact that the observer from a totally different kind of society appears in the field generally implies a certain amount of contact with the outside world. This feature of modern 'primitive' groups has to be considered with the utmost care and precision. It is not the particular group, but the group interacting with one or more surrounding groups, and often a whole chain, that must be studied. This interaction may be by primitive trade and barter-exchange. It may be by inter-tribal warfare. It may be by trade with a modern society or conquest by a modern state. The result is generally that these groups are always modified, and supplement each other even when they do not tend to fusion. Also, within each group, the functions of individual members are better differentitated.

If we then reconstruct a picture of primitive communism from many such observations, that picture need not be valid for any extant group today. It is meant only to explain the general development of such tribes. In this way, it corresponds to the 'starred forms' of words reconstituted by philologists as primitive words, say in the Indo-Aryan group of languages. The existence of any primitive people who spoke such a language exclusively is not proved, but the starred forms do represent a certain original common factor for the languages. Knowledge of these starred forms and rules of philology such as Grimm's law does not enable anyone to translate his own language into any other language of the group; but it does simplify the study.

Unlimited Variability

A feature of primitive life is its unlimited variability. Within the food-gatherer's apparently simple universe, there are innumerable possibilities of specialization, precisely because the inner laws of nature and matter are still hidden from the knowledge of primitive men. For every variety of food gathered (animal, fish, bird, insect, grub, mushroom, fruit, honey, nut, tuber, etc.), there is some special technique developed haltingly through long ages, and generally associated with some complicated fertility rite which is often quite irrelevant in reality. So, most primitive people do not live by gathering all possible foods with equal efficiency. Often, it is the relative seasonal and local abundance of one type of food which determines their domicile and totemic observances.

Therefore, primitive life is far from simple, rational, or uniform at its very basis. The various rites are endlessly complicated, and may become more so if the means of production should change slowly, so that observances whose original purpose is forgotten still persist. One reflection of this unbounded variety is to be seen in language itself. In most tribal regions, there are far more languages than in settled territory, e.g., Assam with well over a hundred languages and major dialects. Not only that, primitive languages have the most complicated grammar. Another striking feature is the absence of generic nouns. If a particular species of animal is the special food of the tribe, then not only do male, young and old of the species have different names, but there are usually names for every variety, say colour, that is to be seen or imagined in the species. Yet, there may be no common name for the species, and there is rarely any generic word 'animal'.

The notion of a general human society was not within primitive man's mental grasp. Men and women outside his own tribe were hardly recognised as human beings, and had no notional rights. The very concept of a general society implies development well out of the primitive stage. Our generic nouns have specialised origins. Thus, the word 'colour' originally meant the colour red, and not colour in general. Simplification of grammar and syntax, and the development of clear general ideas is a feature of large and highly developed societies in which communication between many people is of vital importance.

Tacitus on Germans

To illustrate what is meant by the foregoing, one may consider the description of the Germans by Tacitus. The hard-drinking Germanic tribesmen whose main obsession was war, whose decisions were taken in the common council, inveterate gamblers who left all regular toil to their women or their slaves, greatly resemble the Aryans in our *Rigveda*. These tribesmen also spoke languages belonging to the Aryan stock. Yet, the picture cannot be transposed immediately because the environment was totally different in the two cases. The Indo-Aryans found the highly developed Indus Valley urban culture as a helpless prey, while some of the Germans had been chased out of their own forests by the Gauls, and had painfully experienced the might of Rome. The Gauls (also Aryans) were already developing a strong professional priesthood (like our Brahmins), with a class structure within the tribe due to settled agriculture and differences in the possession of property, combined with extensive trade and an economy progressively dominated by coined money. One may say that they were nearer the Yajurvedic stage. There is no question of primitive communism either among the Germans or the Gauls in the Latin records (of Caesar and Tacitus) which nevertheless contain traces of older beliefs. Nor can the *Rigveda* or the *Yajurveda* be taken to depict a primitive communistic society.

A thoroughgoing study of tribal marriage in Tripura was recently made by a Japanese anthropologist, Miss Chie Nakane (*Man*, 1958, p. 11). She discovered a remarkable and at first puzzling diversity in that small region. The whole question became very simple by investigating the corresponding forms of land tenure, cultivation, and inheritance of property. Then and only then could the entire complex be neatly classified: each particular form of marriage corresponds to one particular type of production. Miss Nakane also noted the progressive influence of adjacent Bengali agriculturists and settlers upon tribal life. New fashions in religion and marriage rites as well as food production were infiltrating tribal life; but she was puzzled to find no reciprocal influence. Actually, she could have found it by going back in history, when settled agriculture was new, when Brahmins were assimilating tribal rites and gods to the 'Hindu' pantheon, and independent tribal groups being absorbed as new castes in a tightly interlocked class-society. The shapeless red-daubed stones worshipped as Kali (or some other deity) in Bengal, as elsewhere in India, are adaptations of primitive tribal cults.

Surplus Sharing Society

The first urban civilization developed on great rivers that flow through a desert: the Indus, the Nile, and in Mesopotamia. These cultures may have originated in oases, which carry us back perhaps to 8000 BC. Kathleen Kenyon's excavations at Jericho in Palestine have indicated such possibility. But the interval between Jericho I and ourselves is much less than a tenth of the time elapsed between the first users of the crudest stone tools and the beginning of the mound at Jericho. To expect primitive man to have preserved social uniformity in this period over so many differences in climate and territory would be theology, not science. Indeed, as the study of prehistory develops, we can trace considerable diversity among people once lumped together as 'primitive'. What remains then of primitive communism?

The essential common factor to all these societies must necessarily lie in their methods of food-procurement. Primitive communism can only be characterized by some feature of its basis. This is that *surplus production is irregular and low, and that any fortuitous food surplus cannot be preserved for long*. This regulates the size and accounts for the solidarity of the group. Really primitive people rarely gather or kill more than they need for immediate use, even in the midst of abundance. Slaughter of game for 'sport' is not a primitive vice. Even when they learn something of food preservation, the excess of food gathered barely amounts to that needed to tide them over the normal lean season. (To this very day, one may see in India members of various tribal caste-groups who have recently found employment for good wages squander their earnings on pay-day rather than save anything). Thus, the surplus has to be consumed, and if he who possesses some formal title to it cannot or will not share it with others, it only makes his group less viable.

The actual methods of sharing are not fixed, but in general no compensation is implied other than the reciprocal obligation to share on an equal basis. Failure to do so would be penalized within the clan or tribe by socially manifested contempt; between such units, control of the special product on each side enforces fairness of the exchange. Hospitality, lavishness in entertainment, receipt and distribution of customary gifts by the chiefs, the generosity which obliges any savage host to present to the parting guest any object admired by the latter are other primitive methods of sharing. It is difficult to imagine a primitive society in which the surplus, generally gathered in cooperation with other members of a group, is allowed to rot rather than being shared. This is a feature of mercantile civilization, which puts high profits above anything else. But primitive surplus cannot be used in such a way as to bind the sharers to produce an even greater quantity for him who first agreed to share it. That is, possession of some current surplus implies no specific control over future production, or the means of production.

The other side of the medal is that surplus food production is not encouraged in primitive society. The tribesmen are helpless in the face of famine, natural disaster, or excessive seasonal variation. Less children are born, proportionately less survive to grow up. Not only their number but their mental development also is limited; the gathering of food under primitive difficulties involves senseless ritual and sacrifice in stultifying degree. The newer society may be more greedy, but with efficient and regular food production—which first means better storage, implying progressively specialized techniques such as leather work, basket making, pottery—it increases the surplus much more rapidly than its primitive ancestors or neighbours.

The implications of obligatory surplus sharing for the relationship between the group and the individual will be considered later. The reader, however, should not visualize primitive man as a 'noble savage' living a simple life untrammelled by any manmade fetters. Savages are capable of making and observing the most complicated taboos faithfully. Nobility implies some ethical standards of truths, whereas our ethics are very much a product of society, hence of the comparatively recent times when sufficiently diverse groups came together to form a society as distinct from a set of non-interacting tribes. On the other hand, the platitude: 'You can't change human nature. Man must earn his daily bread by the sweat of his brow—yet man does not live by bread alone', is even more stupid. Many tens of thousands of years passed before man, the tool-using and tool-making animal, discovered how to make bread. In that interval, his skeleton and the shape of his skull changed a grea deal, but his nature changed much more. Primitive man must not be thought of as fundamentally 'an ordinary human being' of today transferred to a rather barren setting like Robinson Crusoe.

Group-Marriage

This question too is now coloured by the political complexion of the particular writer. Morgan discovered that, among certain aborigines, all members of a given group had special marital rights over all members of the opposite sex in some other group. These rights were not by any means exercised in equal measure by every individual, in practice. The important thing is that the rights were sanctioned without leading to conflict such as would have been aroused in Morgan's own society. Sexual intercourse between members of the same group was *taboo*, illicit. An individual would look upon all male members of a given group and generation as his fathers, of the next generation as his brothers, and the corresponding set of women as his mothers and sisters respectively. Traces of such a system can be discerned in the kinship terminology of many languages. The customs of many forest tribes manifest decidedly stronger remnants.

However, the attempt so often made to force the actual marriage customs of a socially atrophied backward group into a fictitious mould set after Morgan (or Engels) is ridiculous. On the other hand, opponents of the theory deny the existence of group marriage at any time, with a surprising virulence. They explain away all observable survivals separately, with great patience and misplaced ingenuity, to reach the conclusion that there can be no rational explanation for main patterns of human behaviour.

Not every primitive group of people evolves towards a higher form. Many groups have died out precisely because superstition prevented them from recognition of some underlying material necessity. Fearful complications of ritual may at times lead a tribe away from some more efficient means of production, towards extinction. It is precisely these complications that strike an external observer most forcibly, and are taken as essentials of primitive society, without recognition of the fact that the particular group remains in an atrophied condition, so that it could not be truly representative of the primitive society that evolved into a higher form. These groups now observed by anthropologists generally do not evolve at all without strong external pressure, and without breaking up. To take a nearer though modern parallel, we may note that declining brahminism discouraged innovation and helped retard feudal India.

Group marriage did not mean promiscuity between the groups involved. Whenever the family was a viable unit under the means of production, fixed partnerships were customary, though not obligatory. Customs and obligation have got a sharp dividing line in primitive society, where the use of force to maintain a pattern of behaviour is extremely rare.

The exogamous groups originally specialized in gathering particular objects for food, and did not at first marry outside the group, if indeed the term marriage can be applied to their sexual association. The specialization led to totems named after edible objects, which still remain among many simple communities, and have developed into *gotra* names, *devaks*, and surnames in India. If one denies that the ancient Indian sages had anything to do with totemism, how explain *gotra* names such as Paippalada—'*pipal* fruit eater' and Badarayana—'descendant of the *ber*'? The myth that the child-god Skanda sprouted six heads because he was born of six mothers at once (and had to suckle them all) can originate only in a society that understood, if not practised, group marriage, when a whole group of women count equally as the mother-in-common of each son. The legend of king Jarasamdha (probably a historical character who built the first cyclopean walls of Rajgir), who was born of two mothers in two halves later joined together, must have had a similar origin.

The obscenity and licentiousness implied under modern conditions is a psychological barrier to the acceptance of group marriage; most people dislike the idea of their ancestors having behaved in any such promiscuous way. Group marriage was no more obscene than it was promiscuous. However, there do survive festivals like the *holi* Saturnalia which may be traced right back to the stone age, and which are definitely licentious, have an obscene element, and encourage promiscuity for a limited period. The point is that these festivals with the features that now seem objectionable to 'the best people' had an entirely different function in primitive times. The food supply was so poor in most stone-age food-gathering societies that sexual activity and fertility were below that of urban beggars today. The annual orgy was essential to secure the necessary minimum of conceptions to keep the group from dying out. What is now lubricious was a badly needed sexual stimulus at one time. To primitive thought the orgy was also a magical procedure for promoting the fertility of all nature; the productive forces of nature were thought to benefit from the same stimulus which helped human procreation. This survives in Tantric theory and some Tantric practices.

Another factor whose importance could not have been obvious to primitive man is the genetic advantage of hybridization. Inbreeding beyond a certain limit makes the offspring less vigorous in most animals and other bisexual organisms; hybrid vigour is well known to geneticists. Two or more highly specialized but inbred groups would be drawn together, more or less gradually, by exchanging the surplus in their specialized products. According to primitive customs, this would eventually lead to exchange of persons, for which one handy form is some kind of marriage relationship between the groups. The new conjoint existence would make both people fitter, as a rule. The varied diet was certainly advantageous, while the unsuspected genetic advantage was even stronger. Because of low efficiency in food production, the exchange of products had to be between groups; hence the marriage relations would naturally be on the same basis—group marriage. At least as important is the broadening of mental horizons by exchange of ideas, and of words. Ultimately, the fusion would be so tight that exogamy would be obligatory, and remain so even when food procurement had improved out of all recognition. At the same time a new and richer language would have developed from the combination.

C. S. Coon has suggested that an 'exchange of women' must at times have accompanied exchange of the oldest stone tools, or of the techniques for making them. This is offered by him as at least a contributory cause for the disappearance of older types like Neanderthal man, by absorption rather than pure extinction. I might add that the sudden appearance of physically superior types such as the Cro-Magnon man could be due to a fertile cross between two previously inbred groups of lesser stature and cranial size.

Group and Individual

The badly formulated 'primitive communism' theory was ably criticized by the late Bronislaw Malinowski. The accuracy of his observations in the Trobriand Islands is not in doubt. The question is whether his criticisms really damage anything except the idealistic patterns imposed by unintelligent predecessors. I consider here only one work of his: *Crime and Custom in Savage Society*, cited hereafter by the code letter *M* with page number. The tribe observed on the coast had subgroups formed on a technical basis: 'The master of the canoe, who acts at the same time as the head of the team and as the fishing magician of the canoe, has first of all to finance the building of a new craft when the old one is worn out, and he has to maintain it in good repair, helped in this by the rest of his crew. In this they remain under mutual obligations to one another to appear each at his post, while every canoe is bound to come when a communal fishing has been arranged. In using the canoe, every joint owner has a right to a certain place in it, and to certain duties, privileges and benefits associated with it. He has his post in the canoe, he has his task to perform, and enjoys the corresponding title, either of 'master', or 'steersman', or 'keeper of the nets', or 'watcher of the fish'. It is the sum of duties, privileges and mutualities which bind the joint owners to the object and to each other' (*M*, 19–21).

The point to note is that this tie by functions in production differs from the corresponding modern relationship in not being based upon a clearly-defined contract and wages; that it does not shift at the will of the worker, or at least that will is rarely exercised. Finally, ownership is joint, though not necessarily equal between members.

It was Malinowski's great contribution to the field to point out what should have been obvious: that primitive law cannot be formulated in the same way as the modern. Punishment is of a different nature without a regular mechanism of force. Custom, ritual, magic or witchcraft and even murder and suicide (for redress of the most grievous wrong) play important parts, but the concept of 'enforcement' can hardly be conveyed to the primitive mind, or expressed in any really primitive language. Thus, the rights of the joint owners in this particular society cannot be examined by their legal aspect, and Malinowski was absolutely correct in his insistence that the whole complex of custom, ritual, etc., had to be studied together. He failed, however, to stress how the productive basis had introduced certain important modifications so that his subjects were in a state of transition.

We have already seen differentiation of functions among fishing boat crew. Come now to what was done with the greater surplus produced by this specialized organization—an organization that was, in fact, due to the need of producing that surplus. 'In most cases, only a small proportion (of the catch of fish) remains with the (coastal) villagers. As a rule, we should find a number of people from some inland community waiting on the shore. They receive bundles of fish from the fishermen and carry them home, often many miles away, running so as to arrive while it is still fresh . . . The inland village supplies the fisherman with vegetables: the coastal community repays with fish. This arrangement is primarily an economic one. It has also a ceremonial aspect, for the exchange has to be done according to an elaborate ritual. But there is also a legal side, a system of mutual obligations which forces the fisherman to repay whenever he has received a gift from his inland partner, and vice versa. Neither partner can refuse, neither may stint in his return gift, neither should delay . . . On the coast, the natives never have enough vegetable food while the inland people are always in need of fish. Moreover, custom will have it that on the coast all the big ceremonial displays and distributions of food, which form an extremely important aspect of the public life of these natives must be made with certain specially large and fine varieties of vegetable food, which grow only on the fertile plain inland. There, on the other hand, the proper substance for (ceremonial) distribution and feast is fish . . . Between the two communities the exchanges are not carried out haphazard, any two individuals trading with each other at random. On the contrary, every man has his permanent partner in the exchange, and the two have to deal with each other. They are often relatives-in-law, or else sworn friends, or partners in the important system of ceremonial exchange called *kula*. Within each community again the individual partners are ranged into totemic sub-clans. So that the exchange establishes a system of sociological ties of an economic nature, often combined with other ties between individual and individual, kinship group and kinship group, village and village, district and district (*M*. 22–6).

The primitive nature of these transactions as contrasted with the modern trade that occasionally visited the islands is shown by the absence of accounts, haggling, or a fixed exchange rate. Though no tally was kept, 'the social behaviour of the natives is based on a well-assessed give-and-take always mentally ticked off and in the long run balanced (*M*. 26). Under the free and easy appearance of the transactions, covered by the innate good manner of the natives, 'watchful self-interest' was always present. The question forgotten by Malinowski and ignored by the 'primitive communist' theorizers was of the degree of self-interest. Here, quantity makes all the difference in quality, when primitive man is compared with the calculating modern 'Economic Man'. Further comment is needless, if Malinowski has stated his case accurately, except to point out that his Trobriand society is developed into a very much larger entity than a small village or clan, that the settlement is over fixed territory for each unit, and development is conditioned by production of a perishable surplus under relatively slow means of transport.

Effects of the Surplus

The fish might be perishable, but they could be traded. A good deal of the surplus was distributed within the group by ceremonial feasts, and by the important love of display among savages. Display of surplus piled up gives its owner considerable prestige but that can only be sustained by his generosity in inviting others to partake of it upon various ceremonial occasions. Thus, individual ownership, and self interest manifested in a characteristic way do play a considerable part, rather than absolute submission to a rigid undifferentiated, tribal sharing law such as is thrust upon idealised 'primitive communism' by so many people for whom theorizing is much easier than careful observation. However, some of the surplus could be transformed into more durable objects, and certain forms of property (e.g., share in the boat) could be transferred to another individual against compensation, or transmitted to a 'legal' heir. Thus, Trobriand society had come a considerable distance from palaeolithic and even many neolithic tribes.

A remarkable concomitant of this property is its effect upon social forms within the tribe. Fishing is men's work, and the property so acquired would 'naturally' remain in some way more closely associated with men than with women. But the Trobrianders under discussion had evidently evolved from an earlier form of society in which property was handed down through the female line, and a man's possessions would pass naturally to his sister's children, not to his own. The maternal uncle took an administrative position over the house and family corresponding to what most of us associate with the father. As a result, an undercurrent of change was making itself felt. Breach of exogamy (*suvasova*) became a 'specially interesting and spicy form of erotic experience' for the tribal libertine. Elsewhere, Malinowski pointed out that what Freudians call the Oedipus complex was here directed against the maternal uncle, and not the father; the 'incest-motive' underwent a corresponding transformation. The underlying cause for this contradiction in tribal custom was a material change in productive relations, as is seen from the following:

'The most important arrangement by which a temporary father-line is smuggled into mother-right is the institution of cross-cousin marriage. A man in the Trobriands who has a son and whose sister gives birth to a girl-child has the right to ask that this infant be betrothed to his son. Thus his grandchildren will be his own kin, and his son will become brother-in-law of the heir to chieftainship. This latter will, therefore, be under an obligation to supply the son's household with food and in general to be a helpmate to his brother-in-law and protector of his sister's family. Thus the very man whose interest the son is likely to encroach is prevented from resenting it and, indeed, made to regard it as his own privilege. Cross-cousin marriage in the Trobriands is an institution by which a man can secure for his son a definite though roundabout right to remain for life in the father's community, through an exceptional matrilocal marriage, and enjoy all the privileges of full citizenship' (*M.* 110). There were other ways of evading mother-right, as for example the father's making extraordinary gifts to his son of property that should in the normal course have passed to his sister's children. But this led to quarrels and was one of the 'methodical system of evasion' for definite but nevertheless 'elastic' prohibitions.

One bit of advice given by the great anthropologist should never be ignored: 'Anthropology is still almost exclusively studied in its singular and sensational manipulations, in cases of blood-curdling crime followed by tribal vendetta, in accounts of criminal sorcery with retaliation, of incest, adultery, breach of taboo or murder. In all this, besides the dramatic piquancy of the incidents, the anthropologist can, or thinks he can, trace certain unexpected, exotic, astonishing features of primitive law: a transcending solidarity of the kindred group, excluding all sense of self-interest; a legal and economic Communism; a submission to a rigid, undifferentiated tribal law' (*M*, 73). Malinowski was careful to study the whole complex of production, custom, law, ritual, usages, taboos, myths and variations in all of these. This makes his work so much more valuable than that of his colleagues. It is an excellent Marxist procedure; much more useful than quoting Marx on every page but neglecting to observe the basic reality before one's eyes. Yet, when all is said, there remains one fact that he might still have emphasized: the savage could not think of life outside his group, and often preferred suicide to expulsion, even in a climate and land where survival for an able individual was not difficult. There was a power in primitive communal life which in the last resort transcended individual self-interest. This must have been all the stronger under more rigorous conditions, as in the stone age.

Archaeological Review 1*

Piklihal Excavations: *By F.R. Allchin. Andhra Pradesh Govt. Archaeol. Ser., No. 1, Hyderabad, 1960. Pp. xvii, 154, 64 plates. Price Rs. 15.* **Neolithic Cattle-Keepers of South India: A Study of the Deccan Ash-Mounds:** *By F.R. Allchin. London (C.U.P.), 1963, pp. xiv, 186, 12 plates, 22 text figs. Price £2.15s.*

The territory whereof the prehistory is so well surveyed in these two memoirs lies between the rivers Bhima-Krishna and the Tungabhadra. The area is culturally important as the meeting ground for three linguistic areas, Kanarese, Telugu and the slightly more distant Marathi. The megaliths of Brahmagiri lie a bit further to the south and have archaeological contacts in prehistory with the present work. Three Asokan edicts (Maski Gavimath, Palkigundu) in this region show continuity from prehistory into the full current of Indian history; the transition was undoubtedly hastened by the proximity of important south Indian gold-bearing areas. This continuity from prehistory into modern times is perhaps the most striking feature of Dr Allchin's studies. It is shown that the skulls found in his excavations belong to about the same type of human beings that now inhabit the district; the pottery would not be scorned by the poorer peasants, who still eke a painful living by very primitive tillage out of the same prehistoric terraces. Stone tools have gone out of fashion, but the transition in the same deposits is clear, without any significant interruption. The bones of the prehistoric skeletons were heavier, due undoubtedly to the better diet, rich in meat and calcium.

The first of the two memoirs reports upon the author's excavations at the hamlet of Piklihal, within easy reach of the important mediaeval fort and town of Mudgal. Clear, modest and highly competent, it is perhaps one of the most satisfying reports available on any Indian excavations. Not only have other relevant published reports been studied carefully, but some attention has also been paid to techniques still used by the local peasants, and to other mounds which it may be profitable to excavate in future. The complete pottery sequence from nine trenches at Piklihal, tool

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Man (A Record of Anthropological Science), vol. 64 (1964), pp. 163–4.

sequences (microliths, handaxes, copper and bronze tools, iron implements), grave goods from stone-circle graves and cist graves, and skeletal remains supply a firm basis for comparison with any other excavations. In so far as earlier reports are available, the comparison has actually been made by the author, though the real studies necessarily lie in the future when more sites will have been systematically worked over. The data are neatly tabulated and the notes on surface exploration concisely presented. The work grew out of Allchin's doctoral thesis; he does not underline the increased difficulties caused by prohibition on taking the material out of the country, which unnecessarily held up final evaluation.

The second memoir deals with the extraordinary ash-mounds of the same region, though to the east of Piklihal. The main excavation was of the Utnur ash mound, which established a cultural identity with the older Piklihal Neolithic, but not the later series. There exist more than 30 of these mounds, and many others survive in the onomasticon with place names ending in-*būdi* (ashes). The ashes come from burning dried cattle dung periodically, with a major conflagration at the end of a cycle which finished not only the dung but the wooden stockade and probably dilapidated hutments around the margin of what had been a stable for about 800 head of cattle. The layers of ashes are clearly separated, without intermediate occupation, so that the cycles were associated with the same type of occupant. That the dung belongs to the *Bos indicus* cattle and not to buffaloes was established by the hoofprints and cattle bones that Allchin succeeded in lifting from the site. This confirms Bruce Foote's pioneer guess, and disposes of the numerous and decidedly less intelligent conjectures made by many others who noted the heaps of ashes. The neolithic inhabitants not only cleansed their Augean stables by fire instead of water, but were not above burning down the entire settlement to roast animals (larger than Charles Lamb's Chinese pigs) at the cyclic sacrifices.

There remain some comments on what Allchin's work leaves out. The conclusions of the first memoir (pp. 122–42) are incontestable as a whole. But the contacts with Iran ascribed to the earliest period, with Harappan influence, would lead to an extraordinary situation that should have been noted. The third millennium BC dating is not in doubt, because the Utnur trench gave a very plausible radio-carbon dating for layer 1-B as 2160 + 150 BC. With an Iranian origin, this would mean that waves of pastoral immigrants began to infiltrate and indeed to percolate through the Indus cultures deep into south India before the fighting pastoralists from the same region followed them to wipe out the Indus culture altogether. These later waves of raiders would be the Aryans, with the first major invasion placed in 1750 BC approximately on the evidence for Meluhha trade being then interrupted. How can one account for this difference: Allchin passes it by altogether. Second, the 'intrusion' (pp. 127f.) associated with the red-and-black ceramics has not been properly worked out. Allchin places it 'in the sixth to seventh century BC for their expansion into the Deccan and for the iron age which must soon have followed.' There happens to be unusually good documentary evidence for the coming of the iron age into the Deccan, much better than possible correlation with the desultory excavations at Jorwe and in Baluchistan. The northern intruders were traders whose route terminated regularly at Paithan in the sixth century BC; that was the century when village settlement on the Godavari spread rapidly. The coming of the iron age is thus marked well before the northern black polished ware, and any investigation has to be directed to the minor tracks which carried northern culture down from Paithan, together with the red-and-black pottery technique.

The second book suffers more from this defect in relating documentary evidence to the testimony of the spade. The fault is not primarily Allchin's, as Indian documents are of little use for the purpose. But he is definitely to be blamed for taking them so seriously, and losing himself in the rather dismal byways of philology when field archaeology (as distinguished from site archaeology) would have served the purpose better. The *Bṛhaj-jābālopaniṣad* says nothing relevant about the ash mounds. If *vibhūti* is to be taken as a loan from the Kanares *būdi*, or a ghost word, it has also to be noted that the Sanskrit is specifically related to the worship of Śiva. Allchin's work (and any anthropological analysis) would make it clear that the bull Nandi (now Śiva's mount) preceded the great god and must have been his totemic representation. In that case, the *vibhūti* derivation is related to the Śiva cult rather than to prehistory. Similarly, the *holi* festival involves a great bonfire, generally in the same place year after year. But it is by no means a cattle festival, being rather a great Saturnalia with a certain amount of obscenity and (in outlying places) promiscuity. As such, it is much nearer to the Asokan *samāja* and the Pali *nakkhatta-kilā* than to the ash mounds. The *polā* is a cattle festival, and the *pa-ha* equivalence in Tamil makes it tempting to see the *holi* here; but the time of the year for the *polā* generally falls in the late monsoon, when burning the dung would be difficult if not impossible. The main feature of the *polā* is a cattle procession, without a bonfire. This sort of criticism is easy to extend (say to *Kon)*, and could have been obviated had Allchin paid some more attention to the actual conditions of life among the people observing the customs cited. For example, the 'dung cones' have no ceremonial or prehistoric connotation in spite of their striking appearance and the photographs shown. They are simply fuel stores for the monsoon in a land where dried cattle-dung cakes are the cheapest type of fuel; the average peasant rarely gets anything else to burn. The store is plastered over with a dung-clay mixture because the contents must be kept dry throughout the monsoon, and there is not enough room in any peasant hut. Similarly, the Lamans who follow their cattle herds over the country do not fit into the neolithic context. They are the sad remnants of a great transport service that was the mainstay of feudal logistics, and can be documented from the seventh century AD onwards. Most Lamans (and the Lambadi, etc.) originally come from Rajasthan, though now settled for generations in their present homes.

Rather than go into such details, it might be as well to note a few possibilities for further work. Up the Malaprabha, there are heavy deposits of handaxes. A great centre like Badami, with its sixth-century temples and modern fairs, undoubtedly has origins in prehistory which would be well worth the investigation. If the Ashmound people boolied every year with their cattle (as they must have done, going west in the dry season), what was their normal range? If they went up the Bhima river, they are surely connected with the rock engravings and pre-pottery microlith deposits on the upper reaches of that river. In that case, the Iranian contacts of the culture need not imply migration, but a diffusion without the corresponding movement of human beings. Second, there still exists a small group of cattlemen who travel up and down the river valley under discussion, season after season. They no longer drive great herds, but a few sacred cattle which give the name Nandi to their keepers also. The bulls are trained to give some sort of performance, and perhaps to do a little simple divination as well. The range of this transhumance is definitely from deep into Kanarese territory to Poona and Ahmadnagar.

This can be followed up in historic times. The principal deities and places of pilgrimage in Maharashtra (e.g. Pandharpur) have well defined Kanarese associations, so that the constant movement up and down the river valley, with cycles longer than the annual booly, is well attested. This would have corresponded better to the continuity of pottery and tools than anything in the carelessly written and badly edited (or with Kane, often unedited) texts which show how—but not a where or when—Brahmins were influenced by local custom. Field work in ethnology may give the correct answer to some of the problems raised; it is to be hoped that such work will be done before the peasant and low-caste traditions vanish from the Indian countryside.

Archaeological Review 2*

Prehistory and Protohistory in India and Pakistan: *By H.D. Sankalia. University of Bombay. Price Rs. 39.50.*

The book represents the Bhagwanlal Indraji lectures delivered at the University of Bombay, December 6–13, 1960. The author is Professor of proto-Indian and ancient Indian history at the Deccan College Research Institute, Poona: he is also Professor-in-charge, departments of ancient Indian culture and archaeology, University of Poona. The large format, good printing and general get-up of this book make it an excellent volume for the library shelves; it is not of much use when taken down from the shelf, as will be seen from what follows.

A work of this type could have been written in one of two styles: first, the Pauly-Wissowa manner, compact, terse, comprehensive, up-to-date to the very moment of publication, and meticulously indexed to convey the maximum information in a minimum compass. Such a book would be indispensable for reference, and as a handbook to accompany the serious worker into the field. Dr Sankalia's laboured effort is very far from being up to this standard.

Extraneous Matter

The great deal extraneous matter dragged in, by the very scruff of the neck as it were, serves to impress only the ignorant, being of no relevance to the question under discussion. For example, the author himself refers to Mellaart's shell-beads found at Cyprus (p. 148) and then admits that 'the analogy may be regarded as quite fortuitous and without significance'—an admission that applies rather closely to most of the statements in the book. But Mellaart comes again on p. 274 in an even more diffuse reference to Hacilar. If this is meant to show the author's wide knowledge, why not bring in Catal Huyuk as well?

**The Times of India*, 13 October 1964. [The publication date of the reviewed book is 1962–63.]

In discussing Harappan culture, we find on p. 167: 'Gamesmen with heads of a ram and ox are indeed interesting in themselves, but also take back the antiquity of similar pieces in the game of chess. For all we know, these gamesmen might belong to the game of chess, or a game very similar to it. A game board for such a game has been recovered from the Royal Graves of Ur.' Unfortunately, there is no demonstrable or even probable connection with chess; nor is there any connection shown here between the board found at Ur and the gamesmen of the Indus.

A second possibility would have been to follow in the tracks of such great masters of exposition and synthesis as the late V. Gordon Childe. Actually, Childe's magnificent work on putting together the archaeological evidence for the ancient East is passed by in silence, the sole reference to Childe himself being on technological stages (p. xiv). Even this is not properly digested, or less emphasis would have been laid by Sankalia on the term 'Chalcolithic Age' and the like. Wheeler's *Early India & Pakistan to Ashoka* is cited in the bibliography, but Wheeler's crisp exposition and boldly drawn outline contrast with Sankalia's muddle.

The prime necessity here is some idea of what prehistory means in the light of current research. The change from food-gathering to food-production, with an intermediate pastoral stage is perhaps the main development in pre- and proto-history. Yet nowhere do we find a list of the edible staples that grow wild in the territory; without such staples, no development out of savagery would have been possible, except by pure intrusion.

The great question in Indian prehistory is the beginning of the iron age—but again, not for Sankalia. He barely notes the age itself, and certainly not its date. In the Deccan (apparently, for the location is left vague), the stone age 'life persisted until it was suddenly changed by a new wave of people, from the north and the south, who came with a knowledge of iron, agriculture and town-planning in about the 4th century BC'. And that is that. Just how this wave managed to come from two opposite directions at once and who the people were seems immaterial.

Collation of Data

Similarly for the transition to history. Some attempt has to be made to collate archaeological finds with written records. This is one effort that could be better made by an intelligent (the qualification is very necessary) Indian than by a foreigner. Sankalia never condescends to note the existence of the Purus, who occur early in the Rig Veda and persisted in the Punjab down to the time of Alexander. The Northern Grey Ware ought to have some connection with this branch of the Aryans. Nevertheless, with touching faith and invincible patriotism, he says of the Puranas, 'I think that those works, however much inflated, do contain an element of truth'. Maybe so, but what element, and where is the proof? Particularly, the archaeological proof that one should find in such a book as the present, and could hardly expect to find elsewhere.

One further defect that vitiates this work as exposition is the lack of a sense of proportion. The Frontispiece is devoted to spouted Jorwe ware from Nevasa. The real importance of the site and the ware is apparently that Dr Sankalia directed these particular excavations. When Allchin talks of Iranian contacts (p. 271 f.), the carefully worked out argument seems doubtful to Sankalia, who himself rushed with even slenderer evidence to show Iranian contacts with Navda Toli when the site was first dug up. Of Allchin's beautifully worked out pottery index and model excavations, the book gives hardly a hint beyond the reference.

The technical defects go beyond all the rest. The disjointed sentences show not only lack of command over syntax but absence of logic. Many figures, including nos. 58, 122, 123, etc., carry no scale and so become worthless. Fig. 124 is a map labelled 'Ancient India', but how ancient is not clear. The tribal names and perhaps the whole map are taken from Pargiter, with a few unrelated labels of ceramic wares planked down at random. The Haihayas seem particularly beloved of Sankalia, though their existence is doubtful, and their locality even more so.

The map in fig. 70 shows an 'ancient trade route'; if connected with the chalcolithic and neolithic sites on the same map, regular Indian trade would be incredibly ancient. This passes belief, particularly as the westernmost such route on the said map follows the Deccan scarp. Any trader who tried to go that way would lose his pack-animals, his trade-goods, and most of his skin; he would have had to lose his wits before going because the real trade obviously went along the river valleys, at right angles to the supposed route.

On p. 142, (fig. 60, no. 32; no scale) is a stone ring described after Gordon as a 'mace-head'. This is matched on p. 145, fig. 6, by another, so described, from Langhnaj. On p. 200, it is admitted that such rings might have been weights for digging sticks; on p. 224, 'perforated hammerstones which have been regarded by some people as mace-heads and by others as weights for digging-sticks'. That they could not have been both, and that the precise character is of crucial importance in determining the advance to food production as well as the cultural level passes without comment. The masterpiece is on p. 214: 'There was a thick-sided ring-stone which might have been used at a mace-head, but more probably as the weight of a digging-stick for ploughing'. Ploughing with a digging stick?

Such slipshod 'research' runs through the entire volume. It may account for the sad fact that Indian 'research' excites derision oftener than any other feeling, and explains why Indian students who go abroad for higher studies have often to unlearn things taught them at home.

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